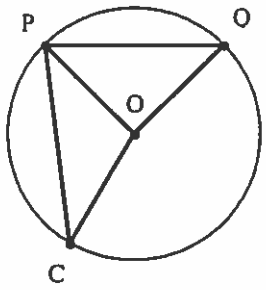
Math Packet
Summer 2018
Incoming 8th Grade

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 11 Review
Date: _____	**Course:** digits - grade 7	Homework
Time: _____	**Book:** digits - grade 7	

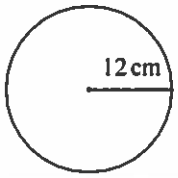
1. Name the radii of the circle shown with O as the center.



What are the radii of the circle?

- ○A. $\overline{PO}$, $\overline{QC}$, and $\overline{CP}$
- ○B. $\overline{PO}$, $\overline{QO}$, and $\overline{CO}$
- ○C. $\overline{PQ}$, $\overline{QC}$, and $\overline{CP}$
- ○D. $\overline{PC}$, $\overline{QO}$, and $\overline{QP}$

2. Find the length of the diameter of the circle.



The diameter is ☐ cm.

3. **Multiple Representations** The diameter of a circle is 24 in. $3x + 6$ represents the radius. Write two equations that you can use to find the value of x. Then find the value of x.

Which equations can you use to solve for x? Select two equations.

- ☐A. $2(3x + 6) = 24$
- ☐B. $3x + 6 = 24$
- ☐C. $3x + 6 = 12$
- ☐D. $2(3x + 6) = 12$

The value of x is ☐.

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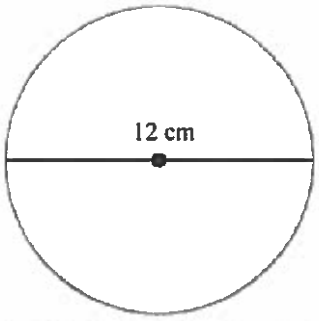
4. **Weather** The diameter of the eye of a certain hurricane was 84 miles. The radius is represented by $7x + 7$. Write an equation to find the value of x. Find the value of x.

Which equation can you use to find the value of x?

- ○ A. $7x + 7 = 168$
- ○ B. $7x + 7 = 42$
- ○ C. $7x + 7 = 84$
- ○ D. $7x - 7 = 84$

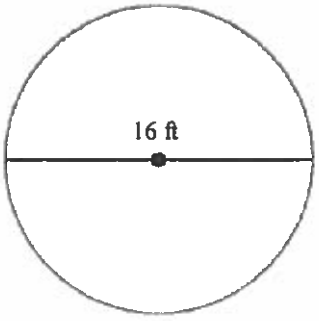
The value of x is ☐.

5. Find the circumference of the circle.



The circumference is ☐ cm.
(Type an exact answer in terms of π.)

6. Find the circumference of the circle. Use 3.14 for π.



The circumference is about ☐ ft.
(Type an integer or decimal rounded to the nearest hundredth as needed.)

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7. Find the diameter of the circle with the given circumference. Use 3.14 for π.

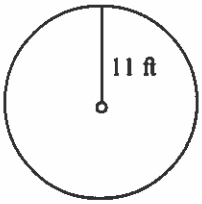
$C = 27$ cm

The diameter is about ☐ cm.
(Round to the nearest tenth as needed.)

8. Find the circumference of the circle in centimeters with a diameter of 0.21 m.

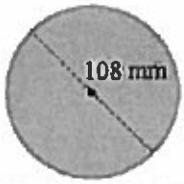
The circumference is ☐ cm.
(Type an exact answer in terms of π.)

9. Find the area of this circle. Use 3.14 for π.



The area of the circle is about ☐ ft^2.
(Round to the nearest hundredth as needed.)

10. Find the area of this circle. Use 3.14 for π.



The area of the circle is about ☐ mm^2.
(Round to the nearest hundredth as needed.)

11. The radius of a circular sign is 21 inches. Equal parts of the sign are painted green and yellow. How many square inches are painted each color? Use 3.14 for π.

About ☐ square inches are painted each color.
(Round to the nearest hundredth as needed.)

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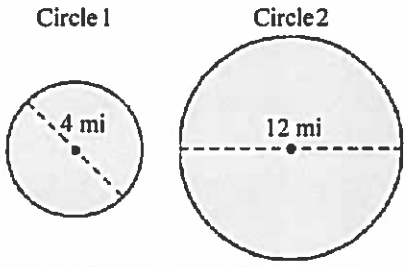
12. Find the areas of Circle 1 and Circle 2. How many copies of Circle 1 would you need to equal the area of Circle 2? Use pencil and paper. If the diameters of both circles were given in millimeters instead of miles, would you need a different number of copies of Circle 1 to equal the area of Circle 2? Explain.



The area of Circle 1 is ☐ mi^2.
(Simplify your answer. Type an exact answer in terms of π.)

The area of Circle 2 is ☐ mi^2.
(Simplify your answer. Type an exact answer in terms of π.)

You would need ☐ copies of Circle 1 to equal the area of Circle 2.

13. A circular plate has circumference 24.5 inches. What is the area of this plate? Use 3.14 for π.

The area of this plate is about ☐ square inches.
(Round to the nearest whole number as needed.)

14. The ratio of the area of a circle to the circumference of a circle, $\frac{A}{C}$, is $\frac{27}{1}$. Find the circumference of the circle.

The circumference of the circle is ☐ units.
(Type an exact answer in terms of π.)

15. **Reasoning** The ratio of the area of a circle to the circumference of a circle, $\frac{A}{C}$, is $\frac{18}{1}$. Find the circumference of a circle with twice the radius of the given circle. Use pencil and paper. How do the area and radius of a circle twice the size differ from the original circle? Explain.

The circumference is ☐ units.
(Type an exact answer in terms of π.)

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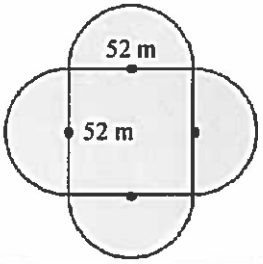
16. Frank needs to find the area enclosed by the figure. The figure is made by attaching semicircles to each side of a 52-m-by-52-m square. Frank says the area is 1,541.28 m^2. Find the area enclosed by the figure. Use 3.14 for π. What error might Frank have made?

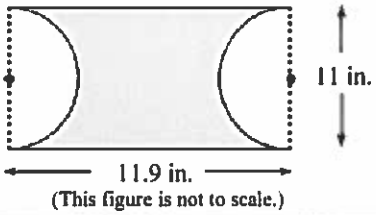


The area enclosed by the figure is ☐ m^2.
(Round to the nearest hundredth as needed.)

What error might Frank have made?

- ○A. Frank subtracted the square's area from area of the semicircles when it should be added to it.
- ○B. Frank did not find the area of the square.
- ○C. Frank did not find the areas of the semicircles.
- ○D. Frank only found the area of two of the semicircles.

17. Find the area of the shaded region. Use 3.14 for π. Use pencil and paper. What would happen to the area if one of the dimensions were changed? Explain your reasoning.



(This figure is not to scale.)

The area is approximately ☐ in^2.
(Round to the nearest hundredth as needed.)

18. A farmer is putting up a fence for his animals. He originally had the fence enclosing a square area. The square was 20 ft by 20 ft. Suppose he uses the same amount of fencing to enclose a circular area. What is the area of the circle? Use 3.14 for π.

The area of the circle is ☐ ft^2.
(Round to the nearest whole number as needed.)

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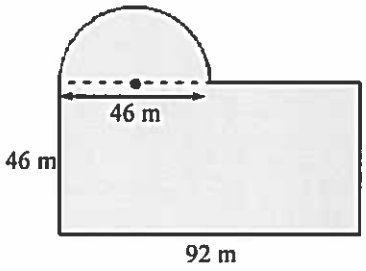
19. The figure shows the outline of a new pier that is going to be built at the ocean. What is the area of the pier? Use 3.14 for π. Use pencil and paper. Draw another figure which has the same area as the given figure.



The area of the pier is ☐ m^2.
(Round to the nearest hundredth as needed.)

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 16 Review Homework
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1. Describe the likelihood of the following statement.

You roll an even number on a standard six-sided number cube.

What best describes the likelihood of the statement?

- ○ Certain
- ○ Unlikely
- ○ Impossible
- ○ As likely as not

2. **Error Analysis** Each player in a game has a 1 out of 4 chance of winning. The probability of winning is $\frac{1}{4}$. One player incorrectly thinks this means the probability of winning is 0.4. What is the correct probability as a decimal? How do you think the player found the incorrect decimal? Use a word or phrase to describe this probability.

P(winning) $= \frac{1}{4}$ as a decimal is $\square$.

How do you think the player found the incorrect decimal?

- ○A. The player divided 10 by 4.
- ○B. The player divided 1 by 4.
- ○C. The player divided 4 by 1.
- ○D. The player divided 4 by 10.

What best describes the probability?

- ○ As likely as not
- ○ Likely
- ○ Unlikely

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3. Based on the records for the past several seasons, a sports fan believes the probability the red team wins is 0.40. The fan also believes the probability the blue team wins is 0.45. In a season with 140 games, how many fewer games should the fan expect the red team to win?

The fan should expect the red team to win ☐ fewer games than the blue team.

4. Suppose you have a bag of colored elastic bands and you choose one without looking. The probability the elastic band you choose is blue is P(blue) = 0.5. Write this probability as a percent and a fraction. Use a word or phrase to describe this probability.

P(blue) = ☐%

P(blue) as a fraction is ☐.
(Simplify your answer.)

What best describes the probability?

- ○ Likely
- ○ As likely as not
- ○ Unlikely

5. There are three groups left to present their final projects. The groups are numbered from Group 1 to Group 3. The teacher will choose one group at random to present their project. List all the outcomes in this sample space for this action.

Choose the correct answer below.

- ○A. Student 1 and Student 3
- ○B. Student 1, Student 2, and Student 3
- ○C. Group 1 and Group 3
- ○D. Group 1, Group 2, and Group 3

6. The table shows the types of movies five friends like. One friend is chosen at random. Identify the outcome for the event.

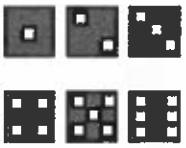
Event: The friend that likes romance movies.

Favorite Movies	
Friend	**Type**
Reggie	Sci-fi movies
Sharrita	adventure movies
Jason	fantasies
Maria	romance movies
Li	comedies

Which of the following is the outcome for the given event?

- ○ Maria
- ○ Jason
- ○ Reggie
- ○ Li
- ○ Sharrita

7. Use the given information to identify the action, the sample space, and the event.



Roll a 3.

Roll the number cube.

1, 2, 3, 4, 5, 6

Complete the table.

Action	
Sample Space	
Event	

8. Is the following an action, a sample space, or an event?

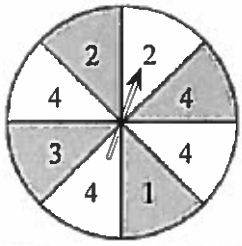
Carlotta picks a smoothie flavor at random.

Smoothie Flavors
Raspberry
Blueberry
Strawberry

Choose the correct answer below.

- ○ action
- ○ sample space
- ○ event

9. The table shows the results for spinning the spinner 80 times. What is the relative frequency for the event "spin a 3"?



Experiment Table					
Outcome	1	2	3	4	**Number of Trials**
Frequency	8	20	10	42	80

The relative frequency for the event "spin a 3" is ☐.
(Simplify your answer.)

10. A 12-sided solid has faces numbered 1 to 12. The table shows the results of rolling the solid 200 times. Find the experimental probability of rolling a number less than 3.

Results

Number rolled	1	2	3	4	5	6	7	8	9	10	11	12	**Total**
Frequency	15	13	14	16	19	14	15	30	18	14	15	17	200

The experimental probability of rolling a number less than 3 is ☐.
(Simplify your answer.)

11. The table shows the results of a survey of 100 people selected at random at an airport. Find the experimental probability that a person selected at random is going to City A.

Airport Destinations

Destination	Number of Responses
City A	22
City B	42
City C	12
City D	22
City E	2

The experimental probability that a person selected at random is going to City A is ☐.
(Simplify your answer.)

12. Find the theoretical probability of the event when rolling a 12-sided die.

P(11)

P(11) = ☐
(Type an integer or a simplified fraction.)

13. A class is flipping a coin to see what the probability of getting heads is. The class flips a coin 47 times and heads comes up 8 times and tails comes up 39 times. What is the experimental probability of getting heads? What is the theoretical probability of getting heads?

The experimental probability of getting heads is ☐.
(Type an integer or a simplified fraction.)

The theoretical probability of getting heads is ☐.
(Type an integer or a simplified fraction.)

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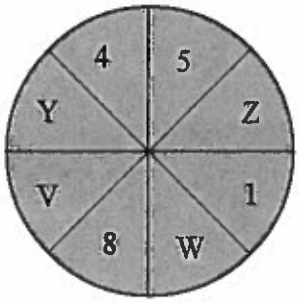
16. You are playing a game using this spinner. You get one spin on each turn. Find a complete probability model for one spin of the spinner.



Which list shows a complete probability model for the spinner?

○A. $P(\text{letter}) = \frac{4}{8}$, $P(\text{even number}) = \frac{2}{8}$

○B. $P(\text{letter}) = \frac{4}{8}$, $P(\text{odd number}) = \frac{2}{8}$

○C. $P(\text{letter}) = \frac{4}{8}$, $P(\text{number}) = \frac{4}{8}$

○D. $P(\text{even number}) = \frac{2}{8}$, $P(\text{odd number}) = \frac{2}{8}$

17. There is a bag of marbles with 12 blue marbles, 12 red marbles, and 12 yellow marbles. You are going to choose one marble at random. Are the outcomes of this event equally likely?

Choose the correct answer below.

○ No

○ Yes

18. **Arts and Crafts** An arts and craft supply store has a large crate that contains silver, copper, and brass beads. Several friends take turns pushing their hands into the beads, grabbing one, recording the bead type, and placing the bead back into the crate. They then repeat the process. The table shows the count for each bead type. Write a probability model for choosing a bead.

Choosing Beads	
Silver	99
Copper	63
Brass	288

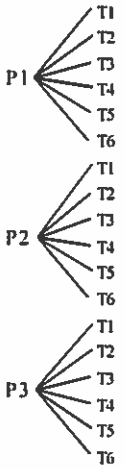
P(silver) = ☐, P(copper) = ☐, and P(brass) = ☐

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 17 Review Homework
Date: _____	**Course:** digits - grade 7	
Time: _____	**Book:** digits - grade 7	

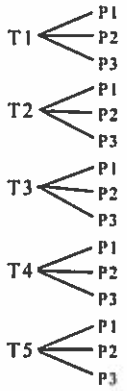
8. **Multiple Representations** A designer has designed three pairs of pants (P1, P2, and P3) and six tops (T1, T2, T3, T4, T5, and T6) to create outfits. Use a tree diagram to display the sample space of possible outfits if he chooses a top and then pants for each outfit. How many different outfits could he create? Use pencil and paper. Use a table to display the same sample space and compare the table to your tree diagram.

Which tree diagram below displays the sample space of possible outfits?

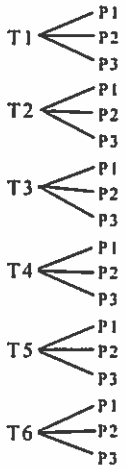
○A.



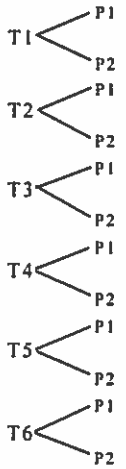
○B.



○C.



○D.



He could create ☐ different outfits.

9. A person can order a new car with a choice of 9 possible colors, with or without air conditioning, with or without automatic transmission, with or without power windows, and with or without a CD player. In how many different ways can a new car be ordered with regard to these options?

There are ☐ different ways that a new car can be ordered.

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 3 Review Homework
Date: _____	**Course:** digits - grade 7	
Time: _____	**Book:** digits - grade 7 (Middle Grades Math)	

1. Decide whether this situation is looking for the part, the percent, or the whole.

5 of 25 apples are red.

The situation is looking for the [ ]

2. **Error Analysis** Cheryl's math teacher asks, "7 is 20% of what number?" Cheryl incorrectly says, "140." What is the correct answer? What error did Cheryl likely make?

7 is 20% of [ ].
(Type a whole number.)

What error did Cheryl likely make?

- ○ A. She wrote the percent equation as percent = whole ÷ part.
- ○ B. She wrote the percent equation as whole = percent · part and did not divide by 100.
- ○ C. She did not divide by 100.

3. The football team has a total of 20 jerseys. There are 6 medium-sized jerseys. What percent of the jerseys are medium-sized jerseys?

[ ]% are medium-sized jerseys.
(Type a whole number.)

4. A local little league has a total of 85 players, of whom 80% are left-handed. How many left-handed players are there?

There are [ ] left-handed players.
(Type a whole number.)

5. Find the sales tax.

Sales Tax		
Selling Price	Rate of Sales Tax	Sales Tax
$60.00	6%	?

The sales tax is $[ ].

9. To find simple interest, you multiply the principal (in dollars), the interest rate (as a decimal), and the time in years. The equation $3.20 = 100 \cdot 0.016 \cdot 2$ shows how to find the simple interest for a certain account after 2 years. What is the interest rate (as a percent)? How much is the simple interest? What is the principal?

What is the interest rate (as a percent)?

- ○ A. 0.016%
- ○ B. 1.6%
- ○ C. 3.20%
- ○ D. 100%

How much is the simple interest?

- ○ A. $3.20
- ○ B. $1.60
- ○ C. $2
- ○ D. $100

What is the principal?

- ○ A. $2
- ○ B. $1.60
- ○ C. $3.20
- ○ D. $100

10. An account has a principal of $500 and a simple interest rate of 4.1%. The table shows the simple interest earned and the new account balance for 1, 2, and 3 years. Complete the table for the fourth year.

Interest Earned		
Time (years)	Simple Interest Earned ($)	New Account Balance ($)
1	20.50	520.50
2	41.00	541.00
3	61.50	561.50
4	?	?

Complete the table.

Interest Earned		
Time (years)	Simple Interest Earned ($)	New Account Balance ($)
1	20.50	520.50
2	41.00	541.00
3	61.50	561.50
4	☐	☐

11. Edward deposited $7,000 into a savings account 3 years ago. The simple interest rate is 3%. How much money did Edward earn in interest? What would be his new account balance?

He earned $☐ in interest.

His new account balance would be $☐.

12. **Reasoning** Tommy earned $19.00 in interest after 5 years on a principal of $100. His simple interest rate is 3.8%. Jane earned $37.00 in interest after 2 years on a principal of $500. Her simple interest rate is 3.7%. Which bank would you rather use, Tommy's or Jane's? Explain your reasoning.

Which bank would you rather use?

○A. Tommy's's because his bank accepted a smaller principal.

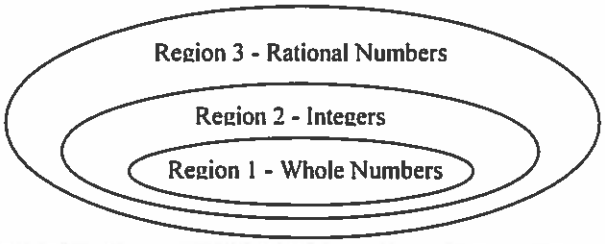
○B. Jane's's because her bank paid more interest.

○C. Jane's's because her investment took less time.

○D. Tommy's's because his bank offers a better interest rate.

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 4 Review Homework
Date: _____	**Course:** digits - grade 7	
Time: _____	**Book:** digits - grade 7 (Middle Grades Math)	

1. **Writing** Use the Venn diagram to determine the smallest region which to place A in when $A = -26 - 11$. Use pencil and paper. Explain why all integers are rational numbers, but not all rational numbers are integers.



Which is the smallest region in which to place A?

- ○ Whole numbers
- ○ Rational numbers
- ○ Integers

2. Insert $<$, $>$, or $=$ between the given pair of numbers to make a true statement.

$|9|$? $|13|$

Complete the statement.

$|9|$ [▾] $|13|$

3. A worker in a silver mine descends 60 feet. Use an integer to represent the change in the worker's position.

The integer that represents the change in the worker's position is [ ].

7. **Reasoning** Which of the following are sums of additive inverses? Use pencil and paper. For any number, describe a simple process you can use to name its inverse. Give examples to show the process for a positive number, a negative number, and a number that is neither positive nor negative.

$8+8$ $\quad -8+(-8)$ $\quad 8+(-8)$ $\quad -8+8$

Select all sums of additive inverses.

☐ A. $8+8$

☐ B. $-8+8$

☐ C. $8+(-8)$

☐ D. $-8+(-8)$

8. **Multiple Representations** A car backs up 28 feet, followed by 8 more feet. The car's position can be represented by the sum $-28+(-8)$. Find the sum. Use pencil and paper. Represent the situation with a drawing. Superimpose a number line in the drawing to represent the situation in a third way.

$-28+(-8)=$ ☐

9. Find the sum.

$$\frac{3}{5}+\left(-\frac{1}{5}\right)$$

$\frac{3}{5}+\left(-\frac{1}{5}\right)=$ ☐ (Type an integer or a fraction.)

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 5 Review Homework
Date: _____	**Course:** digits - grade 7	
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1. Multiply.

$5 \cdot (-4)$

$5 \cdot (-4) = \square$

2. Find the product.

$-1(-18)$

$-1(-18) = \square$

3. **Reasoning** Samuel withdraws $11 from his bank account once each day for five days. What integer represents the change in the amount in the account? Use pencil and paper. Find the integer that would represent the change in the amount in the account if Samuel deposits $11 into his bank account once each day for five days. Explain the difference between the integer for the withdrawals and the integer for the deposits.

The integer $\square$ represents the change in the amount in the account after withdrawing $11 once each day for five days.

4. **Error Analysis** Find $(-7)(-7)(-2)$. Use pencil and paper. Describe an error you could make that results in the opposite of the correct product.

$(-7)(-7)(-2) = \square$

5. **Reasoning** What is the sign of the product $(-7)\left(\frac{1}{6}\right)(2)$? Use pencil and paper to explain your reasoning.

The product is $\square$

6. **Error Analysis** Chris incorrectly says that this product is $\frac{35}{88}$. What is the correct product? What was Chris's likely error?

$$-\left(-\frac{7}{11}\right)\cdot\left(-\frac{5}{8}\right)$$

$-\left(-\frac{7}{11}\right)\cdot\left(-\frac{5}{8}\right)=$ ☐ (Type an integer or a simplified fraction.)

What was Chris's likely error?

- ○A. He found the product of two negative numbers and ignored the first negative sign.
- ○B. He multiplied the denominators wrong.
- ○C. He multiplied the numerator and denominator wrong.
- ○D. He multiplied the numerators wrong.

7. Multiply.

$$-2\frac{1}{2}\cdot-4\frac{2}{3}$$

$-2\frac{1}{2}\cdot-4\frac{2}{3}=$ ☐ (Type an integer, proper fraction, or mixed number.)

8. A farmer has 220 bushels of wheat to sell at his roadside stand. He sells an average of $14\frac{1}{5}$ bushels each day. Represent the total change in the number of bushels he has for sale after 6 days.

The total change in the number of bushels he has for sale is ☐.
(Type an integer, proper fraction, or mixed number.)

Name_____

Two-Step Equations

Date_____ Period____

Solve each equation.

1) $6 = \frac{a}{4} + 2$

2) $-6 + \frac{x}{4} = -5$

3) $9x - 7 = -7$

4) $0 = 4 + \frac{n}{5}$

5) $-4 = \frac{r}{20} - 5$

6) $-1 = \frac{5 + x}{6}$

7) $\frac{v + 9}{3} = 8$

8) $2(n + 5) = -2$

9) $-9x + 1 = -80$

10) $-6 = \frac{n}{2} - 10$

11) $-2 = 2 + \frac{v}{4}$

12) $144 = -12(x + 5)$

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 9 Review Homework
Date: _____	**Course:** digits - grade 7	
Time: _____	**Book:** digits - grade 7	

1. **Reasoning** What is the appropriate inequality symbol for the following situation? Use pencil and paper. When should you use a symbol that allows equality? That does not allow equality? Explain.

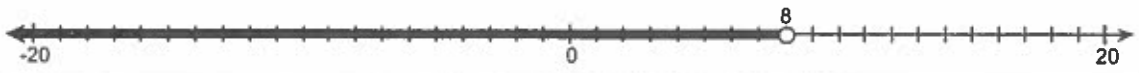
The volume of a cube is at least 20 ounces.

Choose the correct answer below.

- ○ A. $<$
- ○ B. $>$
- ○ C. $\leq$
- ○ D. $\geq$
- ○ E. $\neq$

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 9 Review Homework
Date: _____	**Course:** digits - grade 7	
Time: _____	**Book:** digits - grade 7	

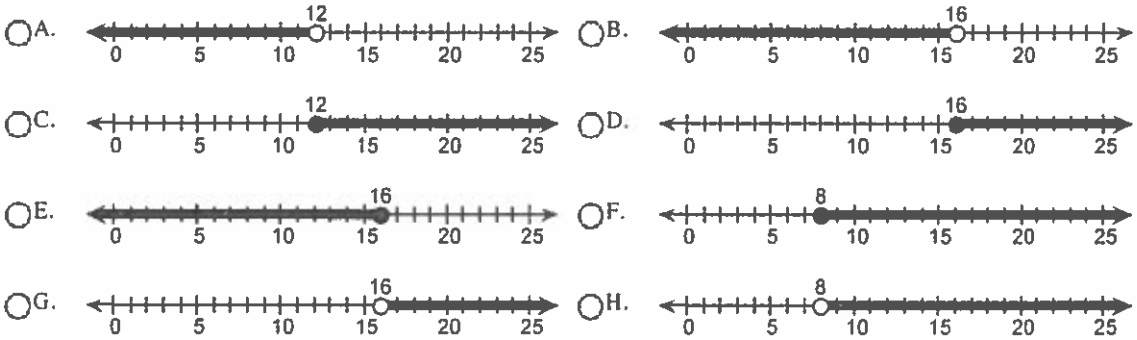
2. **Error Analysis** A math test asks the students to solve the inequality $x - 4 < 12$, and then graph the solutions. Bella said the solutions are $x < 8$ and graphed the solutions as shown below. Solve the inequality and graph the solutions. What error might Bella have made?



What are the solutions?

x ▼ ☐

Which graph below shows the solutions?



What error might Bella have made?

- A. She did not fill in the circle on the graph when she should have.
- B. To solve the inequality, she subtracted instead of added.
- C. She shaded the line on the graph to the left when she should have shaded to the right.
- D. To solve the inequality, she added instead of subtracted.

3. Define a variable and write an inequality to model the given situation.

A light bulb can be no more than 75 watts to be safely used in this light fixture.

If w is the light bulb's wattage, which of the following inequalities models the given situation?

- A. $w < 75$
- B. $w > 75$
- C. $w \leq 75$
- D. $w \geq 75$

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 9 Review Homework
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Time: _____	**Book:** digits - grade 7	

4. Solve $x + 17 \geq 18$, and then graph the solutions.

What are the solutions? Select the correct choice below and fill in the answer box to complete your choice.

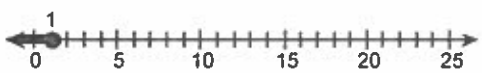
- ○A. $x >$ ■
- ○B. $x \leq$ ■
- ○C. $x \geq$ ■
- ○D. $x <$ ■

Choose the correct graph below.

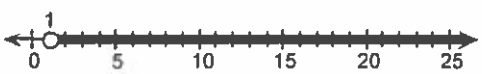
○A.

○B.

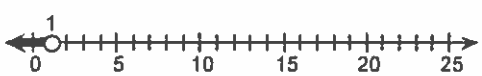
○C.



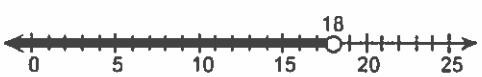
○D.



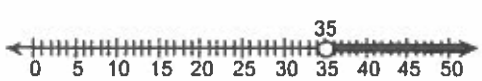
○E.



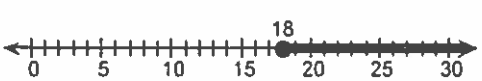
○F.



○G.



○H.

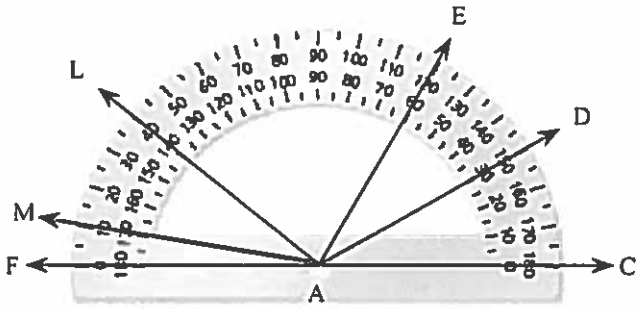


5. Over the next 14 months you have to read at least 56 books. You have to read x books per month. The inequality $14x \geq 56$ represents this situation. Solve the inequality to find the number of books you have to read per month.

You have to read at least ☐ books per month.

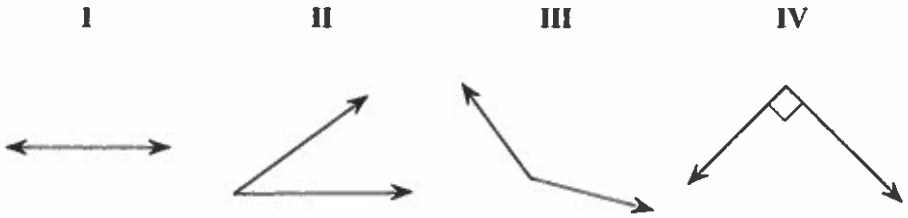
Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 10 Review Homework
Date: _____	**Course:** digits - grade 7	
Time: _____	**Book:** digits - grade 7	

1. Use the protractor to find the measure of $\angle FAE$.



$m\angle FAE = \square°$

2. Which of the given angles is a right angle?



Choose the correct answer below.

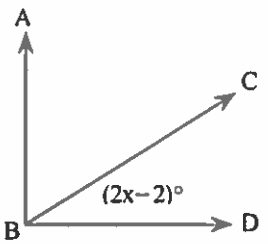
- ○ III
- ○ I
- ○ II
- ○ IV

3. The measure of $\angle 1$ is $(5x - 60)°$. Find the value of x.

$x = \square$

Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 10 Review
Date: _____	**Course:** digits - grade 7	Homework
Time: _____	**Book:** digits - grade 7	

4. **Error Analysis** The measure of $\angle DBC$ is 28°. Taniy incorrectly says that $x = 46$. What is the value of x? What mistake did Taniy make?



(The figure is not shown to scale.)

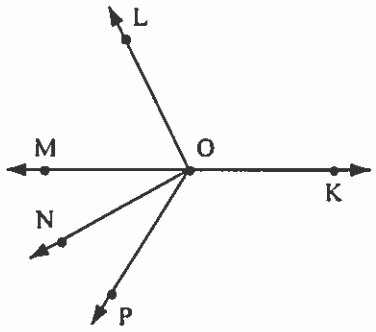
Find the value of x.

$x =$ ☐

What mistake did Taniy make? Choose the correct answer below.

- ○ A. Taniy multiplied each side of the equation by 2.
- ○ B. Taniy set the given expression equal to 180.
- ○ C. Taniy set the given expression equal to 90.
- ○ D. Taniy subtracted 2 from each side of the equation.

5. **Error Analysis** Dexter needs to find each angle in this figure that is adjacent to ∠LON. He incorrectly claims that only ∠LOM is adjacent to ∠LON. Find each angle that is adjacent to ∠LON. Why is Dexter's claim incorrect?



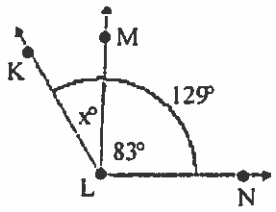
Select each angle that is adjacent to ∠LON.

- ☐ A. ∠KOL
- ☐ B. ∠LOM
- ☐ C. ∠MOP
- ☐ D. ∠MON
- ☐ E. ∠KOP
- ☐ F. ∠KON
- ☐ G. ∠NOP
- ☐ H. ∠LOP

Why is Dexter's claim incorrect?

- ○ A. ∠LOM is adjacent to ∠LON, but other angles are also adjacent to ∠LON.
- ○ B. ∠LOM is not adjacent to ∠LON. They share a side and have no interior points in common, but they do not share a vertex.
- ○ C. ∠LOM is not adjacent to ∠LON. They share a vertex and have no interior points in common, but they do not share a side.
- ○ D. ∠LOM is not adjacent to ∠LON. They share a vertex and a side but, they also have interior points in common.

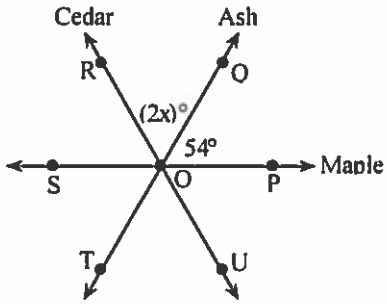
6. **Reasoning** Find the value of x in the figure. Use pencil and paper. Explain how you know your answer is reasonable.



(The figure is not shown to scale.)

The value of x is ☐. (Simplify your answer.)

7. **Street Layout** Three streets, Maple, Ash, and Cedar, all share an intersection, labeled O in the figure. The measure of the acute angle between Maple and Ash, $\angle POQ$, is 54°. The measure of $\angle POR$ is 118°. What is the value of x? Use pencil and paper. Explain how the measures of the angles let you check your work.

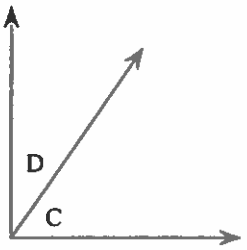


(The figure is not shown to scale.)

The value of x is ☐.
(Simplify your answer.)

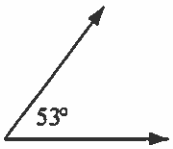
Student: _____	**Instructor:** Pearson School	**Assignment:** Topic 10 Review
Date: _____	**Course:** digits - grade 7	Homework
Time: _____	**Book:** digits - grade 7	

10. **Street Intersection** Three streets form an intersection. $\angle C$ and $\angle D$ are complementary angles. If the measure of $\angle C$ is $x°$ and the measure of $\angle D$ is 44° greater than $\angle C$. What is the value of x? Use pencil and paper. Find the measures of $\angle C$ and $\angle D$. The figure is not drawn to scale.



The value of x is ☐.

11. **Reasoning** Use the given angle to draw an adjacent supplement. Use pencil and paper. Explain how you can check a drawing to see if an angle is the supplement of another angle.



Which of the following is a correct drawing of an adjacent supplement? Select all that apply.

☐A. ☐B. ☐C.