

1. What is the sum of the degree measures of the complement and the supplement to a 16 degree angle?

2. Solve the following equation:  $\frac{x+4}{6} = 4$

3. Robin had 40 apples to give to 3 groups of children  
 - The first group ate 1/8 of the total apples  
 - The second group ate 4 of the total apples  
 - The third group ate 20% of the total apples  
 How many apples were leftover?

4. How much greater is the circumference of the larger circle? (Image on SMART board)

Mar 14-8:44 AM

1. What is the sum of the degree measures of the complement and the supplement to a 16 degree angle?  
 $16 + x = 90$     $x = 74$   
 $16 + x = 180$     $x = 164$    (238)

2. Solve the following equation:  $\frac{x+4}{6} = 4$   
 $\frac{x+4}{9} = 4$    (x = 20)

3. Robin had 40 apples to give to 3 groups of children  
 - The first group ate 1/8 of the total apples    $40 \cdot \frac{1}{8} = 5$   
 - The second group ate 4 of the total apples    $4$   
 - The third group ate 20% of the total apples    $40 \cdot 20\% = 8$   
 How many apples were leftover?    $40 - 17 = 23$

4. How much greater is the circumference of the larger circle? (Image on SMART board)

Mar 14-8:44 AM

LEQ: What are the parts of a circle and how can they be used to solve problems?

Activator: Problem-solving

What is the difference in the area between the larger and smaller

1

$r = 5$     $28.5$

$d = 10$

$a = \pi \cdot 5^2$

$r = 11$

$d = 22$

$a = \pi \cdot 11^2$     $379.94$

$361.44$

Mar 15-6:23 AM

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Circles: Back to basics

What part of the circle is identified?

Based on that, what else can you determine?

What formula uses radius?

What

$a = \pi \cdot r^2$

$d = 13$

Feb 7-6:33 AM

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Let's try these together...

1. An artist is designing new plates for a Home and Garden Show. She is only going to paint the area that is **not gray**. What is the total area that she is going to paint?

$d = 11$     $r = 5.5$     $a = \pi \cdot 5.5^2$   
 $r = 4$     $d = 8$     $a = \pi \cdot 4^2$

2. A painter needs to cover the diagram below with blue paint. What is the total area of the figure?

$a = \pi \cdot r^2$     $a = \frac{1}{2} b \cdot h$   
 $d = 12$     $r = 6$     $a = \pi \cdot 6^2$   
 $\frac{1}{2} \cdot 12 \cdot 4 = 24$   
 $56.52$   
 $80.52$

Mar 15-8:13 AM

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Working backwards review.

To surround a hat, a piece of string that is 84 inches is used. What is the approximate diameter of the hat?

What is the approximate radius?

$c = 84$   
 $a = 27$     $r = 13$

$c = \pi d$   
 $d = \frac{84}{\pi}$   
 $27 = d$

Mar 11-6:55 AM

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[bit.ly/CirclesDay6](http://bit.ly/CirclesDay6)

Exit Ticket

A car tire has a radius that measures 18 inches. What is the total distance that *all four tires* will travel in one rotation?

Mar 15-8:20 AM

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1. What is the sum of the degree measures of the complement and the supplement to a 42 degree angle?
2. Solve the following equation:  $\frac{2x - 3}{2} = 12$
3. Landon, Wes and Tim attempted 25 shots each.
  - Landon made 20
  - Wes made 0.6 of his shots
  - Time made 32% of his shotsWhich statement is true?
  - A They all made the same number of shots
  - B Landon made more shots than Wes
  - C Time made more shots than Landon
  - D Wes made the most shots
4. Amy glued purple ribbon around the edge of her circular mirror. She used 63 inches of ribbon. What is the **approximate diameter** of the mirror?

Mar 14-8:44 AM

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1. What is the sum of the degree measures of the complement and the supplement to a 42 degree angle?  
 $x + 42 = 90$   $x = 48$   
 $x + 42 = 180$   $x = 138$  } 186

2. Solve the following equation:  $\frac{2x - 3}{2} = 12$   
 $2x - 3 = 24$   
 $2x = 27$  }  $x = 13.5$

3. Landon, Wes and Tim attempted 25 shots each.  
- Landon made 20 of his shots     $\frac{20}{25}$   
- Wes made 0.6 of his shots     $\frac{15}{25}$   
- Time made 32% of his shots     $\frac{8}{25}$

Which statement is true?  
A They all made the same number of shots  
B Landon made more shots than Wes  
C Time made more shots than Landon  
D Wes made the most shots

4. Amy glued purple ribbon around the edge of her circular mirror. She used 63 inches of ribbon. What is the **approximate diameter** of the mirror?  
 $C = 63$   
 $C = \pi d$   
 $63 = \pi d$   
 $\frac{63}{\pi} = d$   
 $20.5 = d$

Mar 14-8:44 AM

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LEQ: How can the area and circumference of composite figures be determined?

Activator: Find the area of the following figures.

$$\triangle a = \frac{1}{2} \cdot b \cdot h \quad \square a = l \cdot w \quad \bigcirc a = \pi \cdot r^2$$

Handwritten answers in pink:

- Triangle: 6
- Square: 36
- Circle: 103
- Triangle: 30
- Rectangle: 19.5
- Semicircle: 14

Jan 31-11:36 AM

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**SHADED FIGURES**  
Determine the area of the shaded region shown below.

What would be the area if the entire figure were shaded?  
What part is NOT shaded?  
How can you determine the area of just the shaded part?

$r = 12$   
 $d = 24$   
 $a = \pi r^2$   
 $a = 452$

$a = \frac{1}{2} b h$   
 $a = \frac{1}{2} \cdot 12 \cdot 12$   
 $a = 72$

452 - 72
380

Jan 31-11:35 AM

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In the figure below, the radius of the circle is 5 units and the diameter of the circle is 10 units. Calculate the area of the shaded region.

$r = 5$   
 $d = 10$

$a = 3.14 \cdot 5^2$   
 $a = 78.5$

$a = \frac{1}{2} \cdot b \cdot h$   
 $a = \frac{1}{2} \cdot 10 \cdot 5$   
 $a = 25$

Handwritten calculation:  
78.5  
- 25  
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53.5

Jan 31-11:44 AM

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On your own...Determine the area of the shaded region.

10  
10 cm  
10 cm  
10 cm

$r = 5$      $a = lw$     100  
 $d = 10$      $a = 100 - 75$   
 $a = 3.14 \times 5^2$   
 $a = 75$   
 25 cm<sup>2</sup>

(Hint: Draw it. Label radius + diameter)

Jan 31-3:43 PM

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Complete the classwork  
 A1, B1, B2, B3, B4  
[bit.ly/ShadedWork](https://bit.ly/ShadedWork)

Exit Ticket

5 cm    3 cm

Determine the area of the shaded region of the figure shown to the left.  
 (HINT: The larger circle has a radius of 8 units)

Jan 31-3:48 PM

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1. An angle measures 83 degrees. What is the sum of the degree measures of the complement and the supplement to the angle?
2. Solve the following:  $\frac{-x + 3}{5} = 10$
3. A family went out to lunch and the meal cost \$46.72
  - The sales tax was 8% of the cost of the meal
  - The tip was 15% of the meal and the tax
  - There are 4 people in the family.
 How much did the meal cost, per person?  
 A \$14.00    B \$14.50    C \$14.95    D \$15.25
4. The diameter of a circle is 6 cm. Determine the approximate area of the circle

Mar 14-8:45 AM

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1. An angle measures 83 degrees. What is the sum of the degree measures of the complement and the supplement to the angle?  
 $83+n=90$     $n=7$     $(104)$   
 $83+n=180$     $n=97$

2. Solve the following:  $-x+3=10$   
 $-x+3=50$     $x=-49$   
 $-x=47$   
 $x=-47$

3. A family went out to lunch and the meal cost \$46.72  
 - The sales tax was 8% of the cost of the meal    $2.73$   
 - The tip was 15% of the meal and the tax    $7.56$   
 - There are 4 people in the family.    $50.45 + 7.56 = 58.01/4$   
 How much did the meal cost, per person?  
 A \$14.00   B \$14.50   C \$14.95   D \$15.25

4. The diameter of a circle is 6 cm. Determine the approximate area of the circle.  
 $d=6$     $a=\pi r^2$   
 $r=3$     $a=\pi 3^2$   
 $a \approx 27$

Mar 14-8:45 AM

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LEQ: How can scale factors be used to solve problems?

Error Analysis:

On a map, two cities are 4.5 inches apart. The map uses a scale where  $2\frac{1}{2}$  inches = 22 miles. How many miles are the two cities apart, in reality?

$\frac{2\frac{1}{2}}{22} = \frac{4.5}{x}$     $2\frac{1}{2} \cdot \frac{x}{22} = 4.5$     $x = 9\frac{9}{11}$

1) Solve correctly  
 2) Determine the error the student made  
 3) Describe the mistake in 1-2 sentences

Dec 4-11:34 AM

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model

On a map, two cities are 4.5 inches apart. If the map uses a scale where .75 in = 22 miles, how many miles apart are the cities?  
 $\frac{.75}{22} = \frac{4.5}{x}$     $.75x = 99$     $x = 132$

model

A student is walking a 10 mile path to raise money for cancer research. If the student is able to travel 4 miles in  $2\frac{1}{4}$  hours, how long will it take the student to finish walking the path?  
 $\frac{4}{2\frac{1}{4}} = \frac{10}{x}$   
 $\frac{4}{4} \cdot \frac{4}{x} = \frac{10}{4}$   
 $x = 5.625$

Dec 4-1:33 PM

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Try these...

1. On a blueprint, a scale of  $\frac{3}{4}$  cm =  $2 \frac{1}{3}$  feet is used. If a driveway is  $3 \frac{1}{2}$  cm long on the blueprint, what is the length of the driveway, in feet?
2. If a distance on a map measures 5.6 inches, how far is the actual distance if the scale used reads 2 in = 4.5 kilometers?
3. Jeff is working an 8-hour shift at his job as a landscaper. Jeff is able to landscape  $\frac{3}{4}$  of an acre in  $1 \frac{2}{5}$  hours. How many acres will Jeff landscape after working his shift?

$$\frac{\text{cm}}{\text{ft}} \frac{3/4}{2 1/3} = \frac{3 1/2}{x}$$

$$8 \frac{1}{6} = 3/4 x$$

$$\left\{ \begin{array}{l} \therefore \frac{2}{4.5} = \frac{5.6}{x} \\ 25.2 = 2x \end{array} \right.$$

$$\frac{a}{b} \frac{3/4}{1 2/5} = \frac{x}{8}$$

$$6 = \frac{3}{5} x$$

Dec 5-6:09 AM

model: pictures  
A 4-inch by 6-inch picture was proportionally enlarged as shown. What is the length of the unmeasured side, and what was the scale factor used to enlarge the picture?

$x = 6$ , scale factor of 1     $x = 9$ , scale factor of 2  
 $x = 9$ , scale factor of 1.5     $x = 6$ , scale factor of .66

model: same units  
A Navy submarine weighs 5,321 pounds. During the construction stages, the Navy made a model where 1/2 pounds = 50 pounds. How heavy was the model submarine?

$$\frac{m}{rs} \frac{1}{50} = \frac{n}{5321}$$

$$2160.5 = \frac{50n}{50}$$

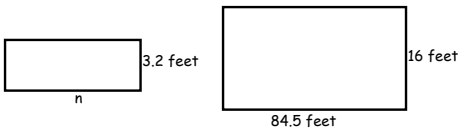
$$(53.21 = n)$$

model: using dimensions  
A new playground has a length that measures 20.5 meters and a width that measures 12 meters. If a scale drawing has a width that measures 6 inches, what is the length on the drawing?

Dec 4-1:34 PM

Try these...

A photograph taken of a skyline is shown below. The photograph was enlarged to form a mural. What is the length of the missing side, and what scale factor was used to enlarge the photograph?



- A 26.4 feet, scale factor of 3.2
- B 16.9 feet, scale factor of 5
- C .60 feet, scale factor of 0.25
- D 42.6 feet, scale factor of 3

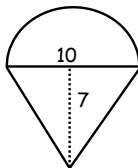
A developer made a model of a new apartment building. The model is constructed so that  $\frac{1}{4}$  foot = 5 feet. If the apartment building is going to be 840 feet tall, how tall is the model?

Dec 4-1:35 PM

Classwork: bit.ly/PropReview2020

Mar 11-6:58 AM

- 1. What is the sum of the complement and supplement to an angle that measures 31 degrees?
- 2. Solve the following:  $\frac{2n + 4}{4} = 5$
- 3. Michael's lawn measures 12 feet wide and 15 feet long. Sue's lawn measures 36 feet wide and 50 feet long. How many times larger is Sue's lawn than Michael's lawn?  
A 1/10      B 1/3      C 3      D 10
- 4. Determine the total area of the figure shown below (image on SMART board)



Mar 14-8:45 AM

$x + 31 = 90$      $x = 59$     (208)  
 $x + 31 = 180$      $x = 149$

1. What is the sum of the complement and supplement to an angle that measures 31 degrees?

2. Solve the following:  $\frac{2n + 4}{4} = 5$   
 $2n + 4 = 20$     (n = 8)  
 $2n = 16$

3. Michael's lawn measures 12 feet wide and 15 feet long. Sue's lawn measures 36 feet wide and 50 feet long. How many times larger is Sue's lawn than Michael's lawn?  
 A 1/10    B 1/3    C 3    D 10  
 12  $\frac{180}{15}$  36  $\frac{1800}{15}$

4. Determine the total area of the figure shown below (image on SMART board)  
 $a = \frac{1}{2}bh$      $\frac{1}{2}a = \pi r^2$   
 $a = \frac{1}{2}10 \cdot 7$      $a = \pi 5^2$   
 (35)     $a = 78.53$   
 (74)    (39.53)

Mar 14-8:45 AM

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LEQ: How can proportions be used to solve complex problems?

NO CALCULATOR TODAY

Dividing fractions review:

$$\frac{3}{4} \div \frac{2}{5} = \frac{3}{4} \cdot \frac{5}{2} = \frac{15}{8}$$

$$6\frac{1}{2} \div 2\frac{1}{3} = \frac{13}{2} \div \frac{7}{3} = \frac{13}{2} \cdot \frac{3}{7} = \frac{39}{14}$$

Apr 25-12:31 PM

Computing unit rates with fractions Two examples Leave ALL answers as improper fractions.

If  $\frac{1}{2}$  gallon of paint covers  $\frac{1}{6}$  of a wall, how much paint is needed for the entire wall?

$$\frac{1}{6} \div \frac{1}{2} = \frac{1}{6} \cdot \frac{2}{1} = \frac{2}{6} = \frac{1}{3}$$

John is working for  $\frac{4}{3}$  hours at his job. He is able to mow  $\frac{3}{4}$  of an acre in  $\frac{1}{3}$  of an hour. How many acres will he mow after working for 4 hours?

$$\frac{a}{h} = \frac{3/4}{1/3} = \frac{x}{4}$$

$$\frac{1}{6}x = \frac{1}{2}$$

$$\frac{1}{6}x = \frac{1}{2} \cdot \frac{6}{1} = \frac{6}{2} = 3$$

$$\frac{3}{4} \cdot \frac{4}{1} = \frac{12}{4}$$

$$\frac{12}{4} \div \frac{1}{3} = \frac{12}{4} \cdot \frac{3}{1} = \frac{36}{4} = 9$$

Aug 25-5:22 PM

Scale Factor

The scale is **ALWAYS** the first ratio that you set up!!!!

On a blueprint, a wall measures  $3\frac{1}{2}$  inches tall. The scale used to create the blueprint is  $\frac{1}{2}$  inch =  $\frac{1}{2}$  foot. How tall is the wall in reality, in feet?

SCALE:  $\frac{1}{2} \text{ in} = \frac{1}{2} \text{ ft}$

$$\frac{1}{2} \cdot x = \frac{14}{2}$$

$$\frac{1}{2}x = \frac{14}{2}$$

$$\frac{1}{2}x = 7$$

$$x = 14$$

$$\frac{2}{1} \cdot \frac{7}{2} = \frac{14}{2}$$

May 18-7:00 AM

[bit.ly/ScaleNOCALC](https://bit.ly/ScaleNOCALC)

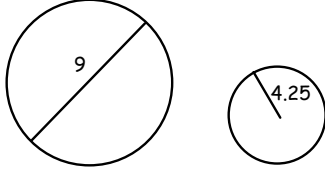
LEAVE ALL ANSWERS AS IMPROPER ON the grid answers.

4 MC, 4 Type in answers

12/4 correct                      ~~3 wrong~~

Mar 6-8:54 AM

1. What is the sum of the complement and supplement to an angle that measures 12 degrees?
2. Solve the following:  $\frac{n-5}{6} = 4$
3. A store buys paper at \$15 per bundle. It then sells the bundles at a price that includes a 40% mark-up. The store offers a discount of 1/10 of the price to their customers. What is the price to purchase 3 bundles of paper?  
 A \$45.90   B \$49.80   C \$56.70   D \$62.60
4. What is the difference in the area of the larger circle and the smaller circle?



Mar 15-7:03 AM

ASSESSMENT

Mar 6-7:27 AM

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Mar 6-8:49 AM

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