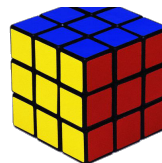


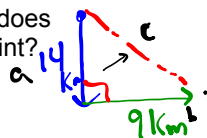


Warm Up Grade 8
May 4, 2016



Assessment Review

1. A ship travels for 14 km toward the south. It then changes direction and travels for 9 km toward the east. How far does the ship have to travel to return directly to its starting point?



2. Show work and answer.

a) $\frac{3}{4} \div \frac{1}{4}$

Flip and multiply
Second fraction

$\frac{3}{4} \times \frac{4}{1}$

$= \frac{12}{4}$ Reduce

$= 3$

b) $\sqrt{36} + \sqrt{25}$
 $6 + 5$
 11

Right triangle
 $c^2 = a^2 + b^2$
 $= (14)^2 + (9)^2$
 $= 196 + 81$

$c^2 = 277$

$\sqrt{c^2} = \sqrt{277}$

$c = 16.6 \text{ km}$

The ship must travel 16.6 km to go back to start



Warm Up Grade 8



1. Mike and his four friends together owe \$12. They agree to share the dept equally.

What is each person's share of the debt?

$12 \div 5 = \$2.40$

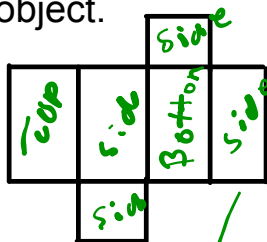
Each person owes \$2.40

2. Use mental math.

a) $\frac{2}{5} \times 30$

$\frac{1}{5} \times 30 = 6$
 $\times 2 \rightarrow \frac{2}{5} \times 30 = 12$

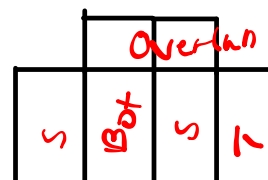
- 3) Which of the following will be a net for a 3D object.



Rectangular Prism



Pentagonal Pyramid net

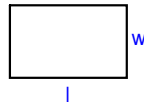


No

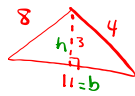
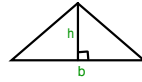
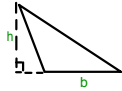
Area of Polygons

base x height

Area of a rectangle $A = \text{length} \times \text{width}$ OR $A = l \times w$

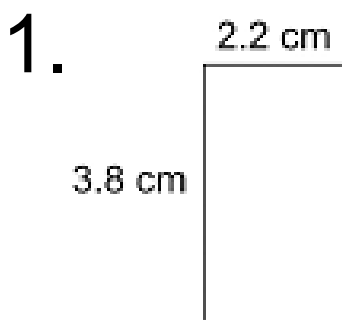


Area of a triangle $A = \frac{\text{base} \times \text{height}}{2}$ OR $A = \frac{b \times h}{2}$



$$\begin{aligned}
 A_{\Delta} &= \frac{b \times h}{2} \\
 &= \frac{11 \times 3}{2} \\
 &= \frac{33}{2} \\
 &= 16.5
 \end{aligned}$$

Find the area of each rectangle.

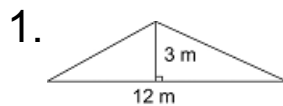


$$\begin{aligned}
 A_{\text{rec}} &= l \times w \\
 &= 2.2 \text{ cm} \times 3.8 \text{ cm} \\
 &= 8.36 \text{ cm}^2
 \end{aligned}$$

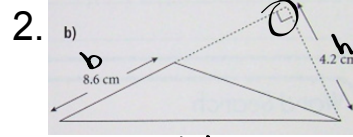


$$\begin{aligned}
 A_{\text{rec}} &= l \times w \\
 &= 12 \text{ mm} \times 4 \text{ mm} \\
 &= 48 \text{ mm}^2
 \end{aligned}$$

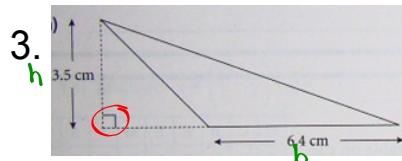
Find the area of each triangle.



$$\begin{aligned} A_{\Delta} &= \frac{b \times h}{2} \\ &= \frac{12\text{ m} \times 3\text{ m}}{2} \\ &= \frac{36\text{ m}^2}{2} \\ &= 18\text{ m}^2 \end{aligned}$$

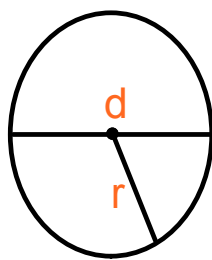


$$\begin{aligned} A_{\Delta} &= \frac{b \times h}{2} \\ &= \frac{8.6\text{ cm} \times 4.2\text{ cm}}{2} \\ &= \frac{36.12\text{ cm}^2}{2} \\ &= 18.06\text{ cm}^2 \end{aligned}$$



$$\begin{aligned} A_{\Delta} &= \frac{b \times h}{2} \\ &= \frac{6.4\text{ cm} \times 3.5\text{ cm}}{2} \\ &= \frac{22.4\text{ cm}^2}{2} \\ &= 11.2\text{ cm}^2 \end{aligned}$$

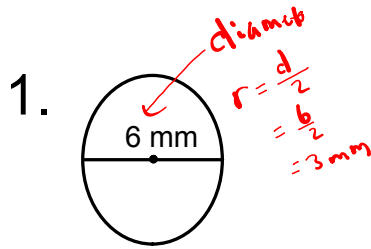
Area of a circle $A = \pi \times \text{radius}^2$ OR $A = \pi r^2$



→ Diameter is the full distance across a circle

→ Radius (half the diameter)

Find the area of each circle.

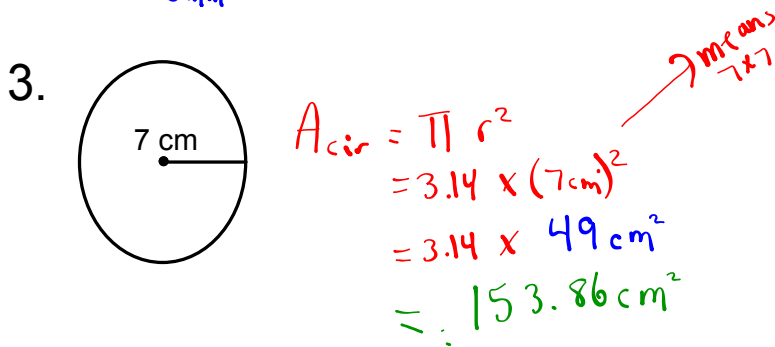
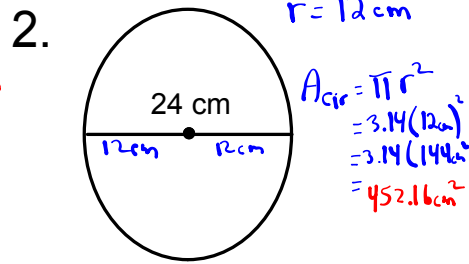


$$A_{\text{cir}} = \pi r^2$$

$$= 3.14 \times (3 \text{ mm})^2$$

$$= 3.14 \times 9 \text{ mm}^2$$

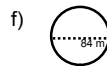
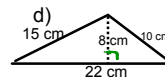
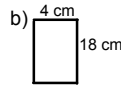
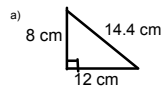
$$= 28.26 \text{ mm}^2$$



Class/Homework

Worksheet of REVIEW

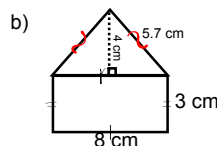
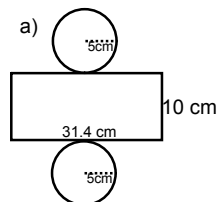
1) Find the area of each



2) Find the area of the each shape and sketch the shape.

- A triangle with height 15 m and base 6 m
- A triangle with height 7 mm and base 6 mm
- A rectangle with length 10 cm and width 2.5 cm
- A square with side length 9 cm
- A circle with diameter 12 cm

3) Find the total area



Attachments

Review of Surface area of 2D Shape Grade 8 Unit 4 PDF.pdf