Curriculum Outcome

(N5) Determine the square root of positive rational numbers that are perfect squares.

(N6) Determine an approximate square root of positive rational numbers that are non-perfect squares.

(SS2) Determine the surface area of composite 3-D objects to solve problems

(N4) **Explain and apply the order of operations, including exponents, with and without technology.**

Warm Up Math 9

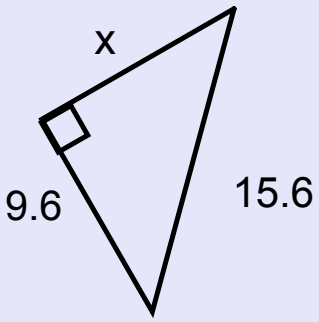
1) Estimate the square root of each of the following using bench marks:

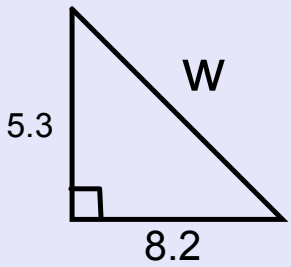
a) $\sqrt{126.8}$

b) $\sqrt{\frac{6}{10}}$

2) find a perfect square between 0.17 and 0.52

3) Find the missing sides (Show work)





Warm Up Math 9

1) Estimate the square root of each of the following using bench marks:

a) $\sqrt{126.8}$

$\sqrt{121}$ $\sqrt{144}$

11 12

11.2
11.1
11.3
11.4

b) $\sqrt{\frac{6}{10}} \Rightarrow \sqrt{\frac{4}{9}}$

$= \frac{2}{3}$

$\sqrt{0.60}$

$\sqrt{0.49}$ $\sqrt{0.64}$

$\sqrt{\frac{49}{100}} = \frac{7}{10}$ $\frac{8}{10} = \sqrt{\frac{64}{100}}$

0.7 0.8

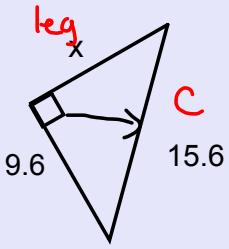
0.79

2) find a perfect square between 0.17 and 0.52

0.17 0.25 0.36 0.49 0.52

$\frac{17}{100}$ $\frac{52}{100}$

3) Find the missing sides



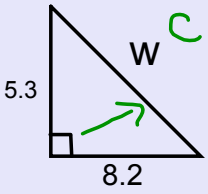
$a^2 = c^2 - b^2$

$a^2 = 15.6^2 - 9.6^2$

$a^2 = 243.36 - 92.16$

$\sqrt{a^2} = \sqrt{151.2}$

$a \doteq 12.3$



$c^2 = a^2 + b^2$

$c^2 = 5.3^2 + 8.2^2$

$c^2 = 28.09 + 67.24$

$\sqrt{c^2} = \sqrt{95.33}$

$c \doteq 9.8$

2) find a perfect square between 0.17 and 0.52

$\frac{17}{100}$ $\frac{25}{100}, \frac{36}{100}, \frac{49}{100}$ $\frac{52}{100}$

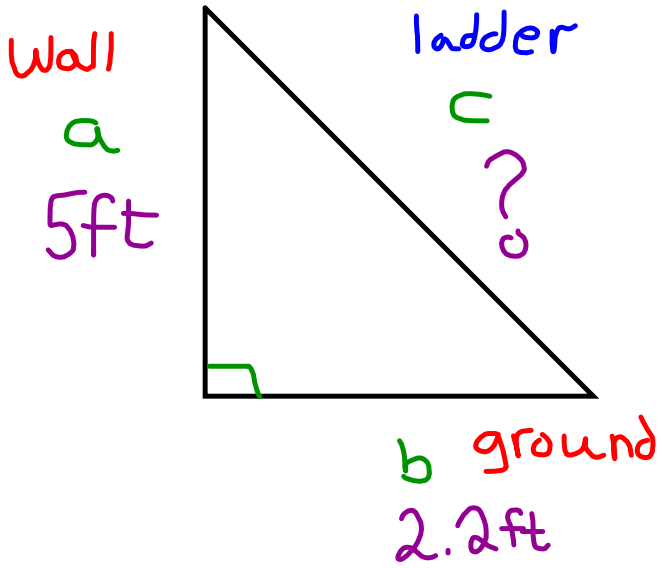
Please Complete
Questions
Pages
18 and 19.

4) a,c,e
5) a,c,e
7) a, c, e

- ENJOY!

Another Ladder Question

If the base of a ladder is 2.2 ft away from the wall and the ladder reaches
a height of 5 ft up on the wall, how long is the ladder?



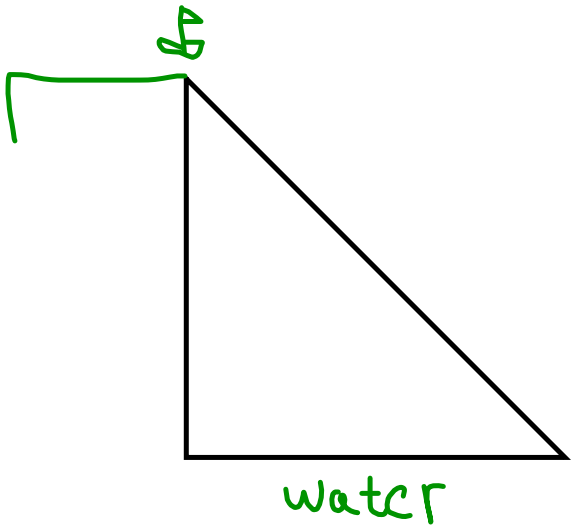
$$c^2 = a^2 + b^2$$

$$c^2 = 5^2 + 2.2^2$$

$$c^2 = 25 + 4.84$$

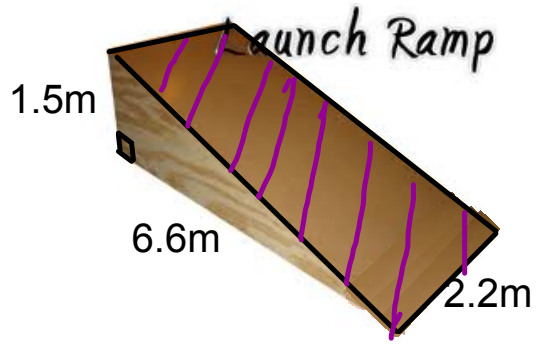
$$\sqrt{c^2} = \sqrt{29.84}$$

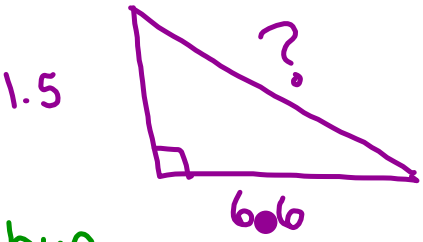
$$c \doteq 5.5 \text{ ft}$$


water

Do you have all the information needed to answer this question?

How much non-slip coating will this ramp need?





hyp

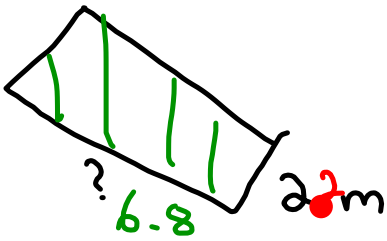
$c^2 = a^2 + b^2$

$c^2 = 6.6^2 + 1.5^2$

$c^2 = 43.56 + 2.25$

$\sqrt{c^2} = \sqrt{45.81}$

$c \doteq 6.8\ m$

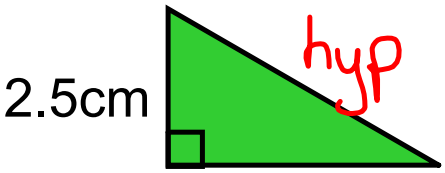


$A = b \times h$

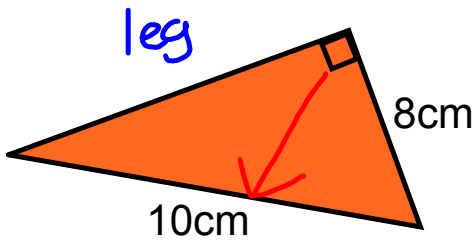
$A = 2.2 \times 6.8$

$A = 14.96\ m^2$

Determine the unknown lenght.



$c^2 = a^2 + b^2$

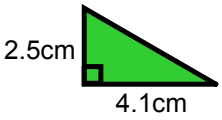


hyp

$b^2 = c^2 - a^2$

The answers are on the next page.

Determine the unknown lenght.



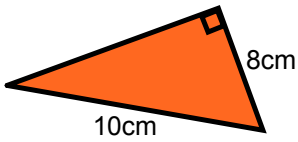
$c^2=a^2+b^2$

$c^2 = 2.5^2 + 4.1^2$

$c^2 = 6.25 + 16.81$

$c^2 = 23.06$

$c \approx 4.8cm$



$c^2=a^2+b^2$

$10^2 = a^2 + 8^2$

$100 = a^2 + 64$

$100 - 64 = a^2$

$36 = a^2$

$6cm = a$

The numbers 6, 8 and 10 have a special name, do you know what it is?

Class / Homework

page 19 & 20

9)a, c
10) a, c,e
11) a,b
12)a c
13) ac
19 a c

Don't have to use number lines

1

$\sqrt{9}$ $\sqrt{10}$ $\sqrt{11}$ $\sqrt{16}$

3 4