

1.9: Working with Powers

Warm-Up

$$1) \quad \frac{-15}{16} \times 3\frac{1}{5} \div \left(-1\frac{2}{3}\right)$$

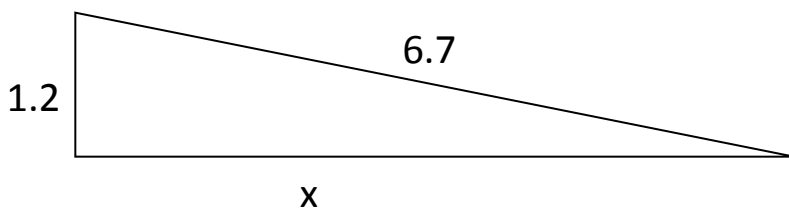
$$2) \quad \frac{2}{5} \times \left(\frac{-1}{2}\right) + \left(-1\frac{3}{4}\right)$$

Review Pythagorean Theorem:

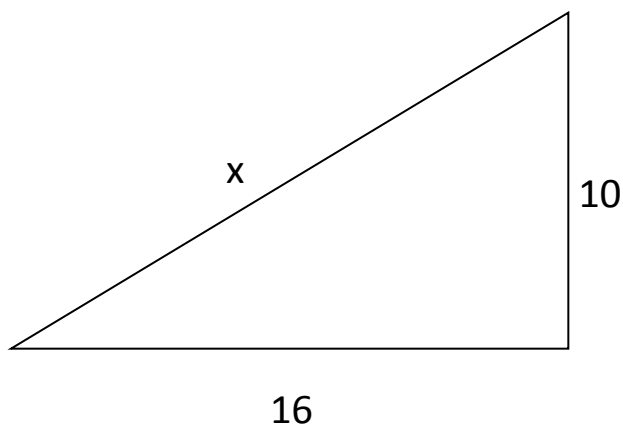
Examples

Determine the size of the missing side (round your answer to the nearest one decimal place):

1.



2.



Complete the Table:

Expression	Expanded Form	Value	Observations
5^3			
$(-5)^3$			
-5^3			
4^2			
$(-4)^2$			
-4^2			
6^4			
$(-6)^4$			
-6^4			

Examples

Evaluate:

Expression	Negative/Positive Prediction	Value
a) 8^3		
b) -3^4		
c) 6^1		
d) $(-3)^6$		
e) -7^2		
f) $(-9)^3$		

3. Page 212 #12

A tugboat and a cruiser leave the harbour at the same time. The tugboat travels due north at 12.0 km/h. The cruiser travels due east at 22.0 km/h. How far apart are the boats after 4 h?

Homework: See outline for homework.