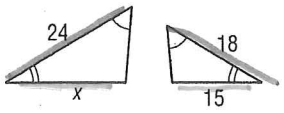
Name: key Class: _____ Date: _____ ID: A

Welcome Back Warm-Up: 7.4 That Was SO Last Year!

Multiple Choice

Identify the choice that best completes the statement or answers the question.

C 1. Find x.



$\frac{x}{15} = \frac{24}{18}$

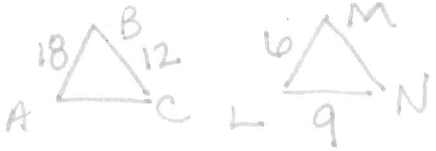
$x = 20$

a. 16
b. 18
c. 20
d. 21

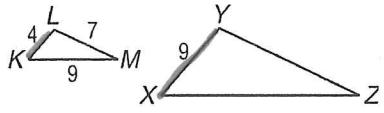
C 2. $\triangle ABC \sim \triangle LMN$, $AB = 18$, $BC = 12$, $LN = 9$, and $LM = 6$. What is the scale factor of $\triangle ABC$ to $\triangle LMN$?

a. $\frac{9}{2}$
b. $\frac{3}{2}$
c. $\frac{3}{1}$
d. $\frac{2}{1}$

$\frac{18}{6} = 3$



C 3. If $\triangle KLM \sim \triangle XYZ$, find the perimeter of $\triangle XYZ$.

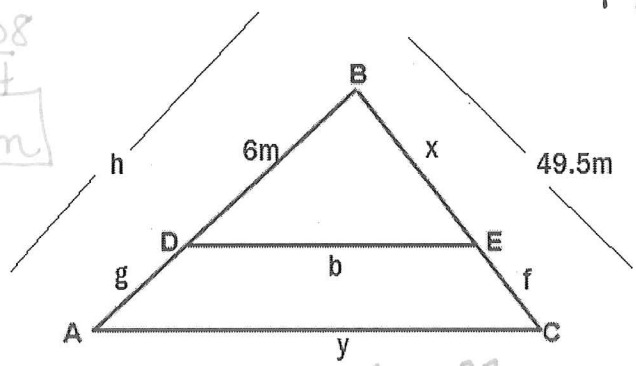


$\frac{P}{20} = \frac{9}{4}$

a. 40
b. 42
c. 45
d. 48

Short Answer

4. Given $\triangle ABC \sim \triangle DBE$. If the perimeter of ABC is 108m and the perimeter of triangle DBE is 24m, find all variables.



$\frac{h}{6} = \frac{108}{24}$

$h = 27m$

$g + 6 = 27$

$g = 21m$

$PR = \frac{108}{24}$

$\frac{x}{49.5} = \frac{24}{108}$

$x = 11m$

$x + f = 49.5$

$11 + f = 49.5$

$f = 38.5m$

$x + b + 6 = 24$

$11 + b + 6 = 24$

$b = 7m$

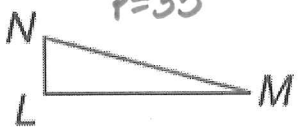
$\frac{7}{y} = \frac{24}{108}$

$y = 31.5m$

Name: _____ ID: A

NL

5. If the perimeter of △LMN is 35 units, find ~~each side length of the triangle.~~

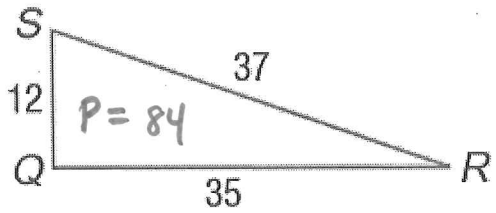


P=35

PR = SLR

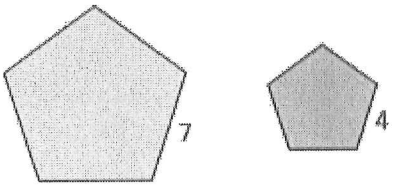
$\frac{35}{84} = \frac{NL}{12}$

NL=5



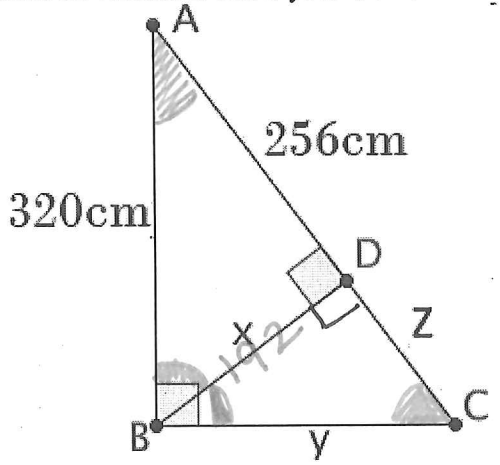
NM / 35
30 / 84

6. Find the ratio of the perimeter if the two pentagons are similar.



$\frac{7}{4}$ or $\frac{4}{7}$

7. The perimeter of △BDC = 576cm and the perimeter of △ADB = 768cm. Write the similarity statement, then final all variables. Show your work.



$\frac{192}{z} = \frac{256}{192}$

$z = 144$

$\triangle ABC \sim \triangle$ BDC $\sim \triangle$ ADB

$x^2 + 256^2 = 320^2$

$x^2 = 36864$

$x = 192$

x = 192cm

y = 240cm

z = 144cm

Hy / long leg

$\frac{y}{320} = \frac{192}{256}$

$y = 240$