

Practice Questions Test 1

1) Simplify:  $4b - 3b + 2b + 6b - 5b$

$4b$

2) In the expression  $15c^3$

a. 15 is the coefficientb. c is the variablec. 3 is the exponent

3) What would the expression be when the brackets are removed from

$$-(6y - 5) - (10y + 15)$$

invisible |

$$\underline{-6y + 5} \quad \underline{-10y - 15}$$

$$\underline{-16y - 10}$$

4) True or false?

a.  $2c + 3d = 6cd$  Falseb. There are four terms in the expression  $5b + 33c + 43d - 5$  True

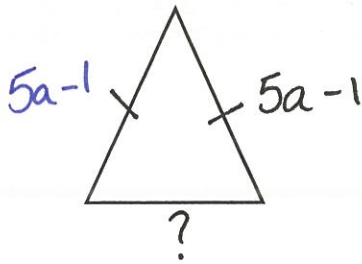
5) Simplify  $(25b + 10) - (5b - 5)$

$\underline{25b + 10} \quad \underline{-5b + 5}$

$20b + 15$

6) Simplify to find the missing side:

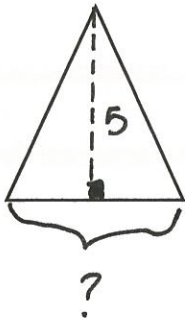
a. What is the side given that the perimeter =  $20a + 6$



$$\begin{aligned}
 P &= S_1 + S_2 + S_3 \\
 20a + 6 &= 2(5a-1) + ? \\
 20a + 6 &= 10a - 2 + ? \\
 (20a + 6) - (10a - 2) &= ? \\
 \underline{20a + 6} - \underline{10a - 2} &
 \end{aligned}$$

$$\boxed{10a + 8}$$

b. What is the side given that the area =  $20y + 30$

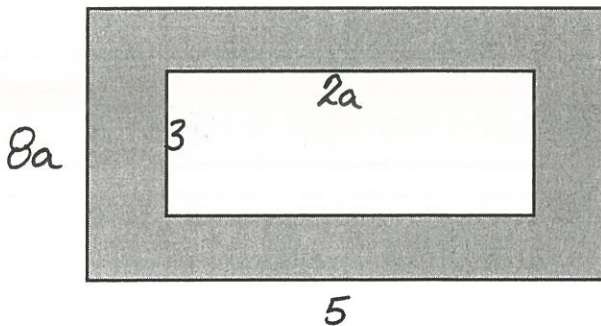


$$\begin{aligned}
 A &= \frac{bh}{2} \\
 2(20y + 30) &= \left(\frac{b(5)}{2}\right) \cdot 2
 \end{aligned}$$

$$\begin{aligned}
 \frac{40y + 60}{5} &= \frac{5b}{5} \\
 8y + 12 &
 \end{aligned}$$

$$\boxed{8y + 12}$$

7) Find the shaded area



$$A_B = 8a(5) = 40a$$

$$A_S = 3(2a) = 6a$$

$$40a - 6a = \boxed{34a}$$

8) Erica makes  $\$(10a + 15)$  per hour babysitting. How much would she make if she worked 2 hours? Simplify your answer.

$$2(10a + 15)$$

$$\boxed{20a + 30}$$