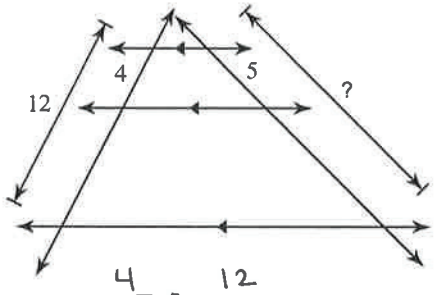
Geometry Name_____

More Practice: Parallel Lines and Proportional Parts

Date_____ Period____

Find the missing length indicated. Be sure to show your beginning geometric ratios.

1)

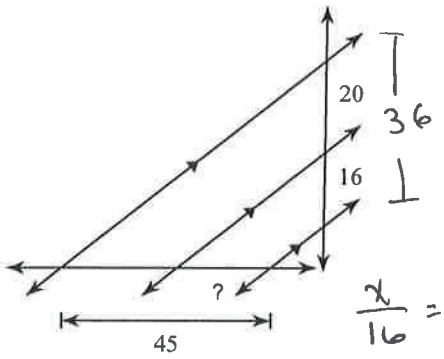


$\frac{4}{5} = \frac{12}{x}$

$4x = 5(12)$

$x = 15$

2)

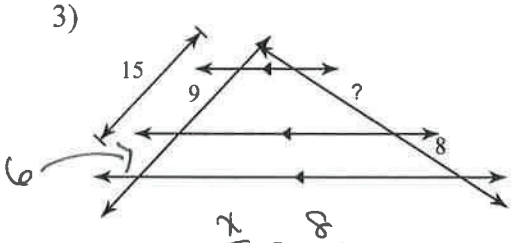


$\frac{x}{16} = \frac{45}{36}$

$36x = 16(45)$

$x = 20$

3)

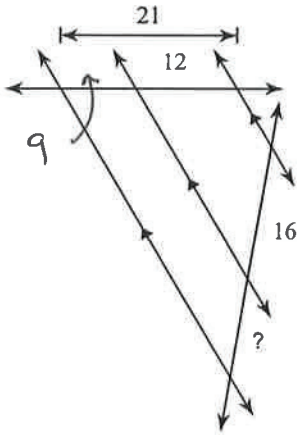


$\frac{x}{9} = \frac{8}{6}$

$6x = 8(9)$

$x = 12$

4)

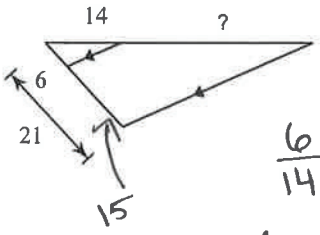


$\frac{12}{9} = \frac{16}{x}$

$12x = 9(16)$

$x = 12$

5)

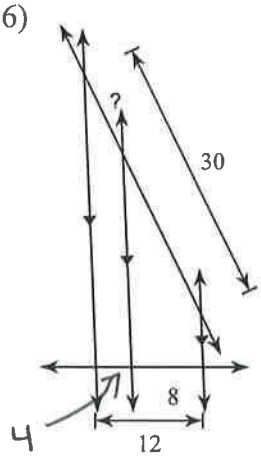


$\frac{6}{14} = \frac{15}{x}$

$6x = 14(15)$

$x = 35$

6)



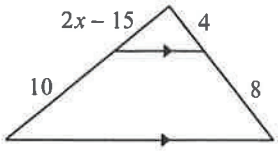
$\frac{4}{x} = \frac{12}{30}$

$30(4) = 12x$

$x = 10$

Solve for x. Be sure to show your beginning geometric ratios.

7)



$\frac{2x-15}{4} = \frac{10}{8}$

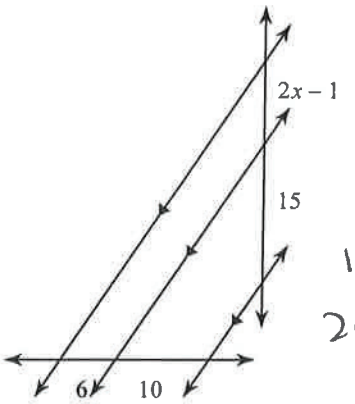
$8(2x-15) = 4(10)$

$16x - 120 = 40$

$16x = 160$

$x = 10$

8)



$\frac{2x-1}{6} = \frac{15}{10}$

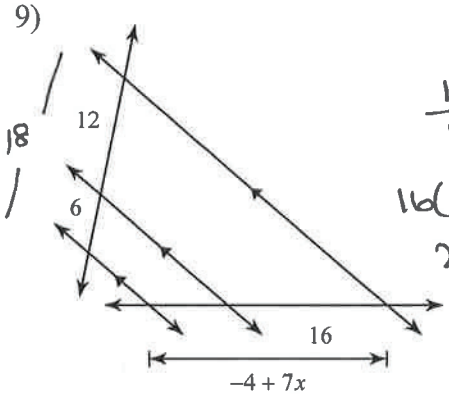
$10(2x-1) = 6(15)$

$20x - 10 = 90$

$20x = 100$

$x = 5$

9)



$\frac{16}{12} = \frac{-4+7x}{18}$

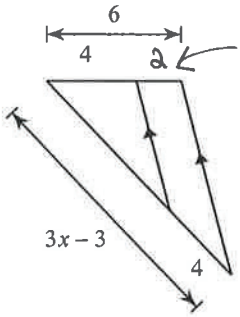
$16(18) = 12(-4+7x)$

$288 = -48 + 84x$

$336 = 84x$

$4 = x$

10)



$\frac{2}{4} = \frac{6}{3x-3}$

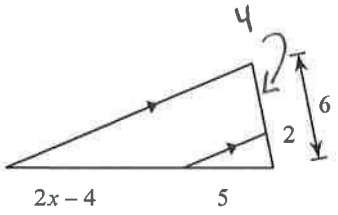
$2(3x-3) = 4(6)$

$6x - 6 = 24$

$6x = 30$

$x = 5$

11)



$\frac{4}{2x-4} = \frac{2}{5}$

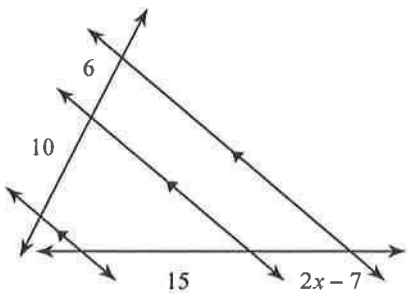
$4(5) = 2(2x-4)$

$20 = 4x - 8$

$28 = 4x$

$7 = x$

12)



$\frac{10}{15} = \frac{6}{2x-7}$

$10(2x-7) = 15(6)$

$20x - 70 = 90$

$20x = 160$

$x = 8$