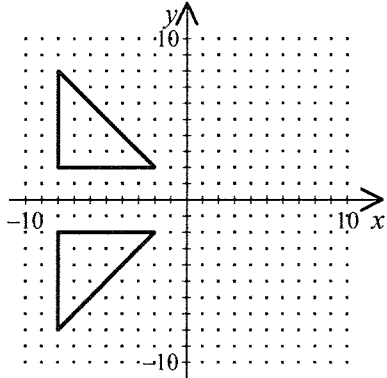


# Review of Ch 7-9.

[1] AB



[2] \_\_\_\_\_

[3] C

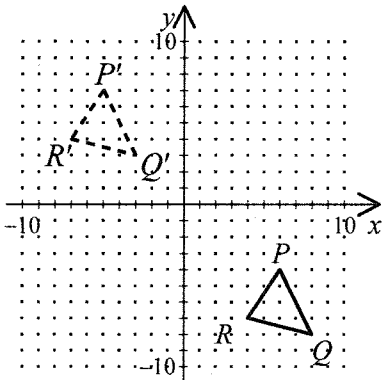
[4] B

[5] B

[6] AD

[7]  $A'(3, 0), B'(0, 2), C'(9, 4)$

[8] C



[9] \_\_\_\_\_

[10] 6

$$\frac{7}{9} = \frac{28}{6x}$$

$$42x = 252$$

$$x = 6$$

[11]  $x = \frac{7}{2}$

$$\frac{5}{x-1} = \frac{7}{x}$$

$$5x = 7x - 7$$

$$-2x = -7 \quad x = \frac{7}{2}$$

[12] C

$$\frac{4}{29} = \frac{8}{x}$$

$$4x = 232$$

$$x = 58$$

[13] B

[14] 90

$$\frac{20}{30} = \frac{2}{3} \quad \frac{2}{3} = \frac{60}{x} \quad \begin{matrix} 2x = 180 \\ x = 90 \end{matrix}$$

[15] 14

$$\frac{8}{12} = \frac{x}{21} \quad 12x = 168 \quad x = 14$$

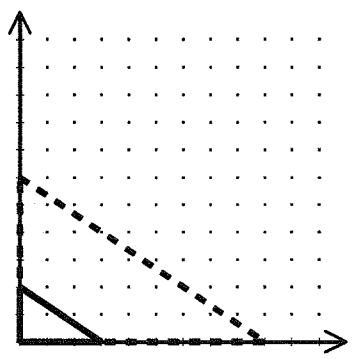
[16] 50 meters



$$\frac{x}{4} = \frac{100}{8}$$

[17] 4.7

$$\frac{3}{4} = \frac{3.5}{x}$$



[18]

[19]  $a = \frac{400}{21}, b = \frac{580}{21}$

$$\frac{a}{20} = \frac{20}{21} \quad \frac{\frac{400}{21}}{b} = \frac{1}{\frac{841}{21}}$$

$$\frac{5}{h} = \frac{h}{15} \quad \frac{5}{a} = \frac{a}{20} \quad \frac{15}{b} = \frac{b}{20}$$

[20]  $a = 10, b = 10\sqrt{3}, h = 5\sqrt{3}$

[21] C  $\frac{9}{x} = \frac{x}{18}$

[22] B  $x = \sqrt{5.15}$

[23] 6.928  $13^2 - 11^2 = a^2$

[24] A

[25] A. right triangle, B. obtuse triangle, C. no triangle

[26]  $x = 17\sqrt{2}, y = 17 + 17\sqrt{3}$  or  $17(1 + \sqrt{3})$

[27] 14

[28]  $x = 8\sqrt{3}, y = 16$

[29] 12

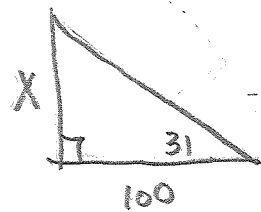
[30]  $\sin P = \frac{20}{29}, \cos P = \frac{21}{29}, \tan P = \frac{20}{21}$

[31] 62 m

[32] C       $\cos x = \frac{7}{20}$        $x = \cos^{-1}\left(\frac{7}{20}\right)$

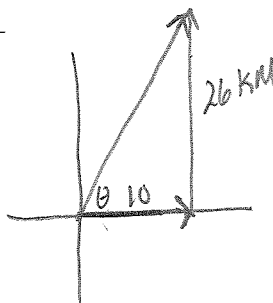
[33] 15.3       $d = \sqrt{(5-(-3))^2 + (-7-6)^2} = \sqrt{64+169} = \sqrt{233}$

[34] 27.9 km; 21.0° east of north



$$\tan 31^\circ = \frac{X}{100}$$

$$X = 100 \tan 31^\circ$$
$$X = 60$$
$$60 + 2$$



$$\text{distance} = \sqrt{10^2 + 26^2}$$
$$\sqrt{776}$$

$$\tan \theta = \frac{26}{10}$$

$$\theta = \tan^{-1}\left(\frac{26}{10}\right)$$

69.° N of E

or 21 E of N