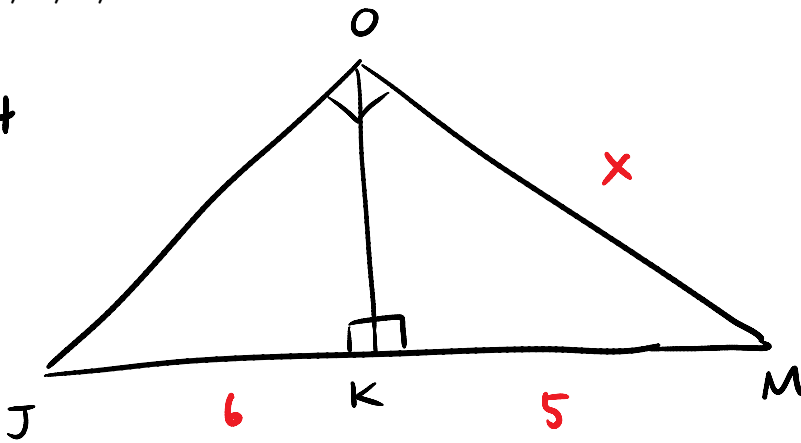


#4



a. $x^2 = 12 \cdot 5$
 $x = \sqrt{60}$
 $x = \sqrt{4 \cdot 15}$
 $x = 2\sqrt{15}$

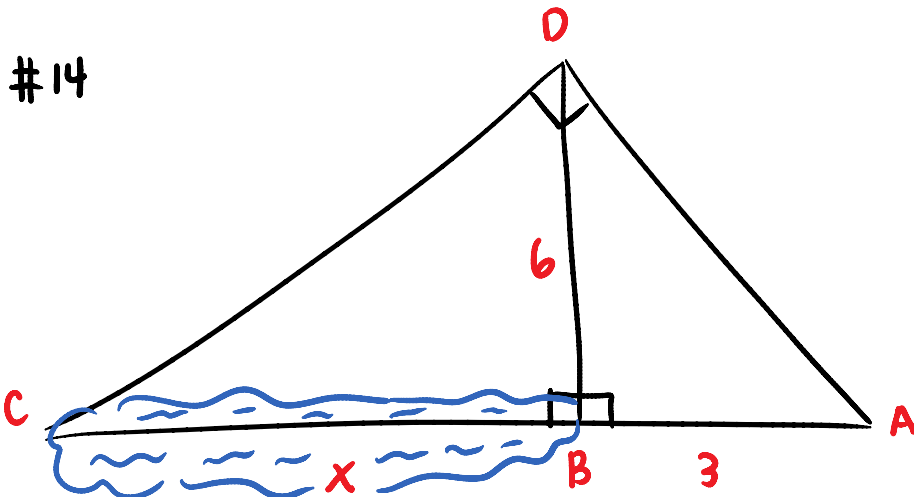
$OK = 2\sqrt{15}$

b. $(2\sqrt{5})^2 = 9 \cdot x$
 $9 \cdot 5 = 9x$
 $5 = x$
 $KM = 5$

c. $(3\sqrt{2})^2 = 3 \cdot x$
 $9 \cdot 2 = 3 \cdot x$
 $18 = 3x$
 $6 = x$
 $JM = 6$

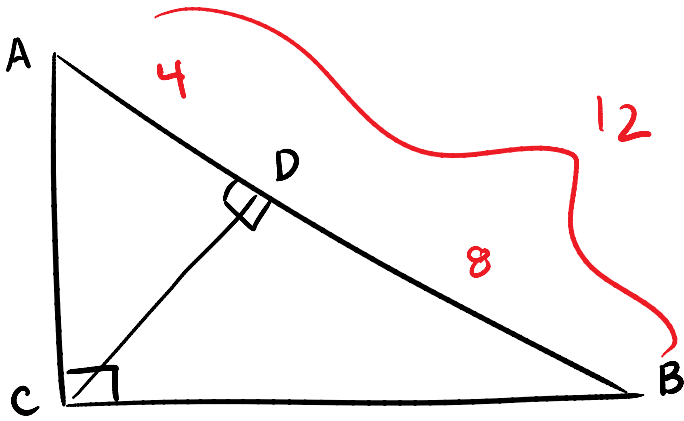
d. $x^2 = 5 \cdot 11$
 $x^2 = 55$
 $x = \sqrt{55}$

#14



$6^2 = 3 \cdot x$
 $36 = 3 \cdot x$
 $12 = x$

#17



a. $x^2 = 7 \cdot 4$

$x = 2\sqrt{7}$

b. $8^2 = 6(x-6)$

$64 = 6x - 36$

$100 = 6x$

$x = 16\frac{2}{3}$

c. $x^2 = 8 \cdot 12$

$\sqrt{x^2} = \sqrt{96}$

$x = \sqrt{16 \cdot 6}$

$x = 4\sqrt{6}$

d. $7^2 = x \cdot 12$

$49 = 12x$

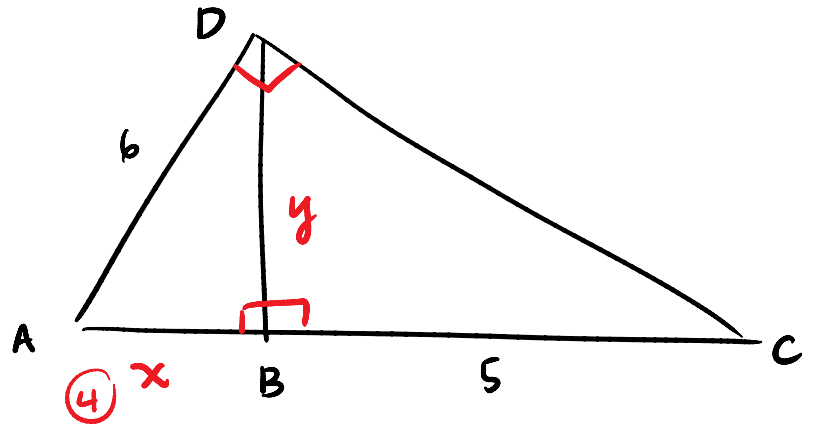
$\frac{49}{12} = x$

$12 - \frac{49}{12} = 7\frac{11}{12}$

#21

Given: $\overline{AD} \perp \overline{CD}$
 $\overline{BD} \perp \overline{AC}$
 $BC = 5$ $AD = 6$

Find: BD



$6^2 = x(x+5)$

$36 = x^2 + 5x$

$0 = x^2 + 5x - 36$

$0 = (x+9)(x-4)$

$x = -9, 4$

$y^2 = 4 \cdot 5$

$\sqrt{y^2} = \sqrt{20}$

$y = 2\sqrt{5}$