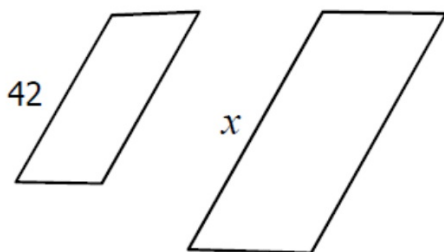


4. If the figures below are similar with a scale factor of 2:3, find the value of x .

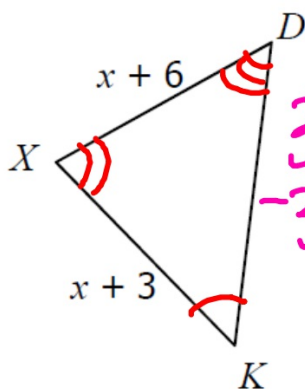
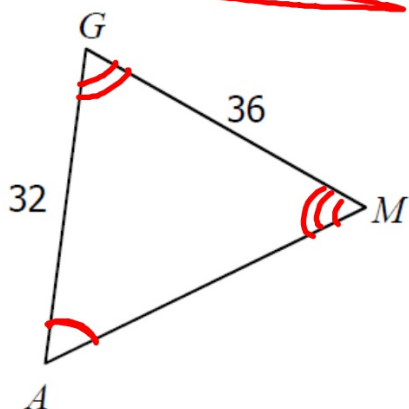


$$\frac{2}{3} = \frac{42}{x}$$

$$\frac{2x}{2} = \frac{126}{2}$$

$$x = 63$$

8. If $\triangle AGM \sim \triangle KXD$, find the value of x .



$$32(x+6) = 36(x+3)$$

$$32x + 192 = 36x + 108$$

$$-36x \quad -36x$$

$$-4x + 192 = 108$$

$$-192 \quad -192$$

$$\frac{AG}{GM} = \frac{KX}{XD}$$

$$\frac{32}{36} = \frac{(x+3)}{(x+6)}$$

$$+4x = -84$$

$$\frac{-4}{-4} \quad \frac{-84}{-4}$$

$$\frac{AG}{KX} = \frac{GM}{XD}$$

$$\frac{32}{(x+3)} = \frac{36}{(x+6)}$$

$$x = 21$$