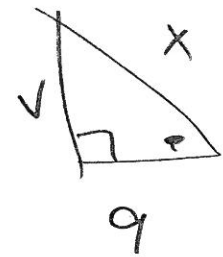
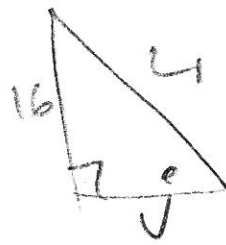
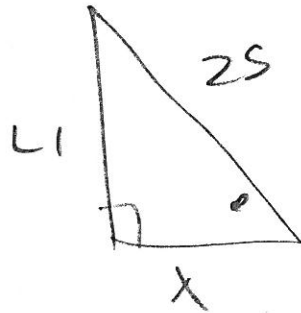
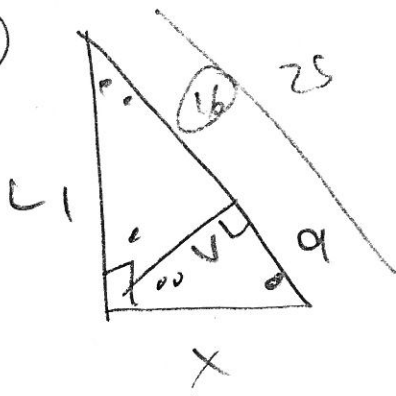


(2)



$$25 - 9 = 16$$

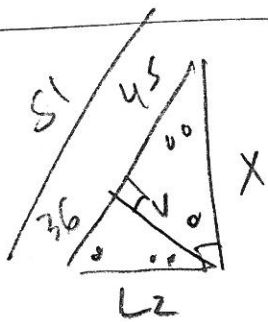
$$\frac{25}{x} = \frac{x}{9} \rightarrow x^2 = 25 \cdot 9$$

$$x = \sqrt{25 \cdot 9}$$

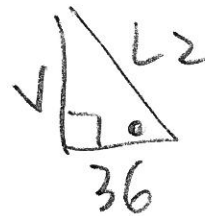
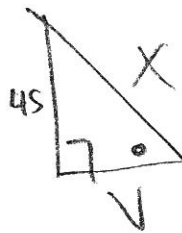
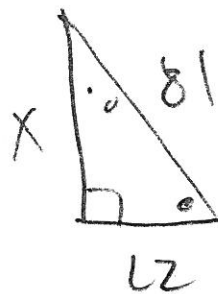
$$= 5 \cdot 3$$

$$x = 15$$

(4)



$$81 - 45 = 36$$



$$\frac{81}{x} = \frac{x}{45} \Rightarrow$$

$$x^2 = 81 \cdot 45$$

$$x = \sqrt{81 \cdot 45}$$

$$= \sqrt{81} \cdot \sqrt{45}$$

$$= 9 \cdot \sqrt{9 \cdot 5}$$

$$= 9 \cdot 3 \sqrt{5}$$

$$x = 27\sqrt{5}$$

$$36 \cdot 45 = 3^6 \cdot 5^1$$

$$\sqrt{3^6 \cdot 5^1}$$

$$3^3 \cdot \sqrt{5} = 27\sqrt{5}$$

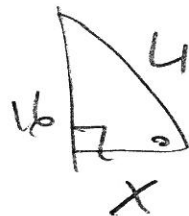
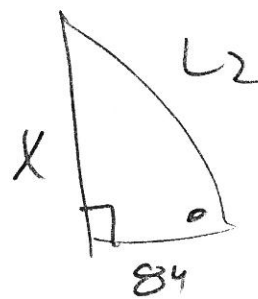
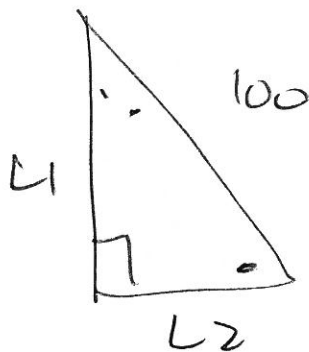
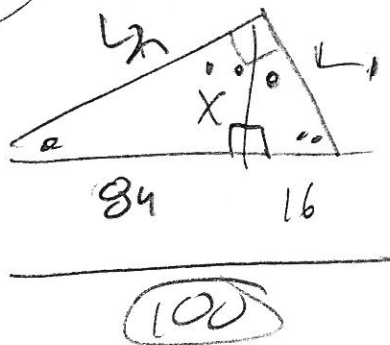
$$x^2 = 36 \cdot 45$$

$$x = \sqrt{36 \cdot 45}$$

$$= \sqrt{729 \cdot 5}$$

$$x = 27\sqrt{5}$$

(6)



$$x^2 = 1344 \quad \leftarrow \quad \frac{x}{84} = \frac{16}{x}$$

$$x^2 = 84 \cdot 16$$

$$1344 = 2^6 \cdot 3 \cdot 7 \quad \downarrow$$

$$x = \sqrt{2^6 \cdot 3 \cdot 7}$$

$$= \sqrt{2^6} \sqrt{21}$$

$$= 2^3 \sqrt{21}$$

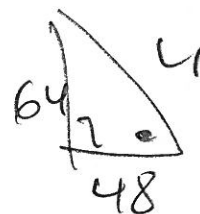
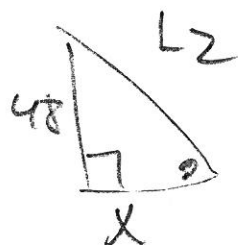
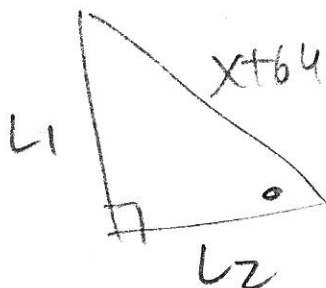
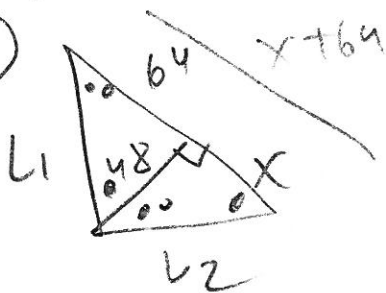
$$= \boxed{8\sqrt{21}}$$

$$x = \sqrt{84 \cdot 16}$$

$$= \sqrt{16} \sqrt{4} \sqrt{21}$$

$$= 4 \cdot 2 \sqrt{21} = \boxed{8\sqrt{21}}$$

(8)



$$\frac{48}{x} = \frac{64}{48} \quad \rightarrow \quad 64x = 48^2$$

$$x = \frac{48^2}{64} = \frac{16^2 \cdot 3^2}{16 \cdot 4}$$

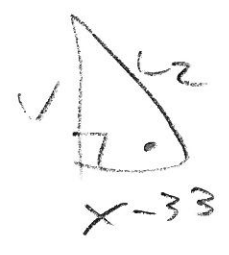
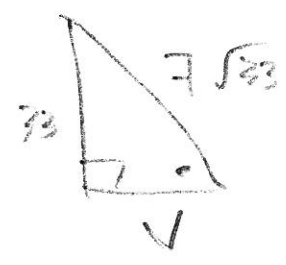
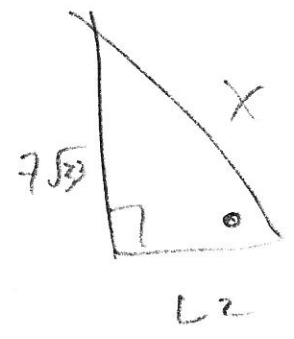
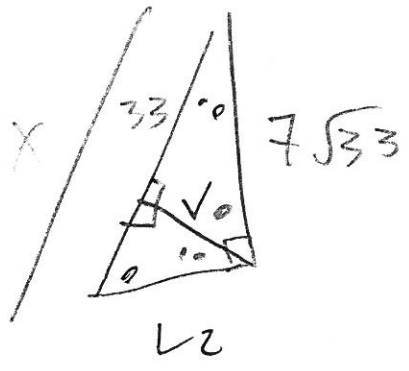
$$= 4 \cdot 3^2 = 36$$

$$x = \frac{2304}{64}$$

$$\boxed{x = 36}$$

$$\boxed{x = 36}$$

10

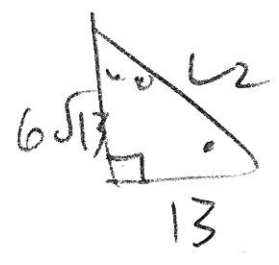
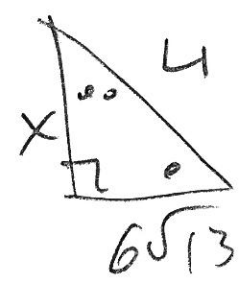
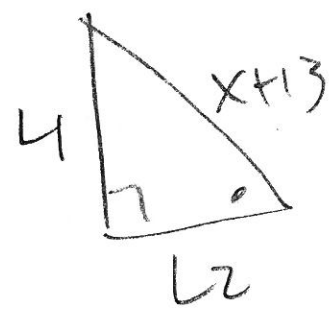
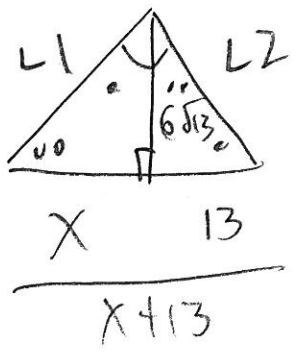


$$\frac{X}{7\sqrt{33}} = \frac{7\sqrt{33}}{33}$$

$$X = \frac{(7 \cdot \sqrt{33})^2}{33} = \frac{49 \cdot \cancel{33}}{\cancel{33}}$$

$$X = 49$$

12

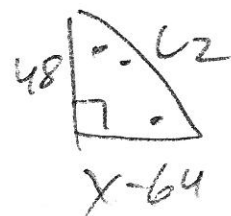
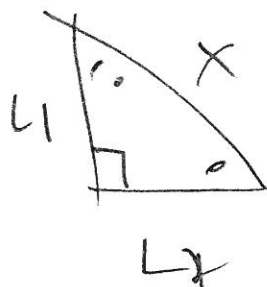
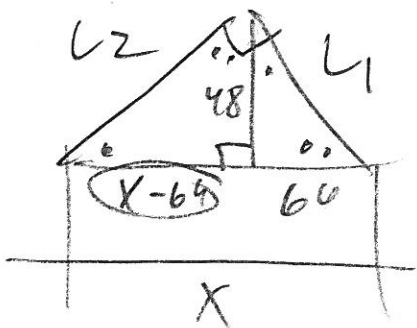


$$\frac{X}{6\sqrt{13}} = \frac{6\sqrt{13}}{13}$$

$$X = \frac{(6\sqrt{13})^2}{13} = \frac{36 \cdot \cancel{13}}{\cancel{13}}$$

$$X = 36$$

14



$$\frac{64}{48} = \frac{48}{X-64}$$

$$64(X-64) = 48^2$$

$$64X - 4096 = 2304$$

$$64X - 4096 = 2304$$

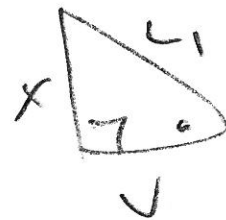
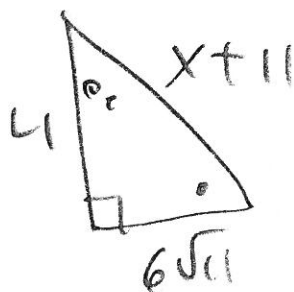
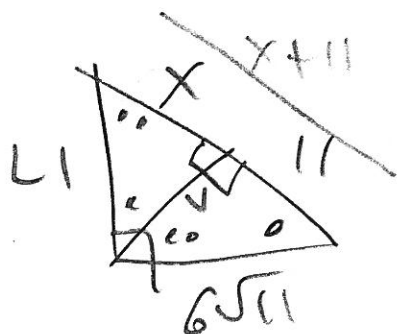
$$+ 4096 \quad + 4096$$

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$$64X = 6400$$

$$X = \frac{6400}{64} = 100$$

16



need v

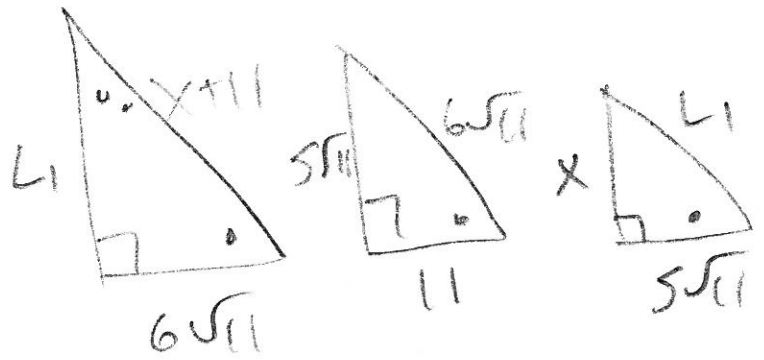
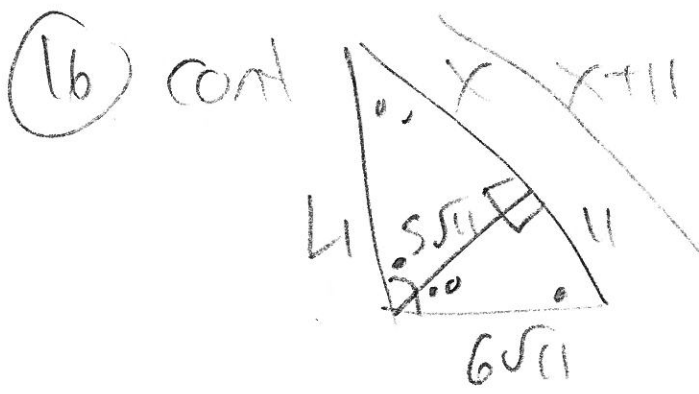
$$v = \sqrt{(6\sqrt{11})^2 - 11^2}$$

$$= \sqrt{36 \cdot 11 - 11^2}$$

$$= \sqrt{25 \cdot 11}$$

$$v = \sqrt{25 \cdot 11}$$

$$= 5\sqrt{11}$$



$$\frac{x+11}{6\sqrt{11}} = \frac{6\sqrt{11}}{11} \quad \text{or}$$

$$\frac{5\sqrt{11}}{11} = \frac{x}{5\sqrt{11}}$$

$$11(x+11) = (6\sqrt{11})^2$$

$$(5\sqrt{11})^2 = 11x$$

$$11x + 121 = 36 \cdot 11$$

$$\frac{25 \cdot 11}{11} = \frac{11x}{11}$$

$$11x + 121 = 396$$

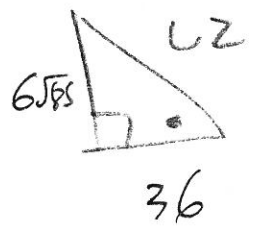
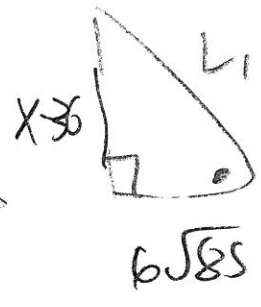
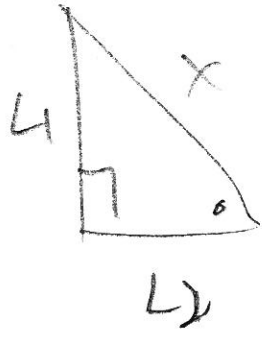
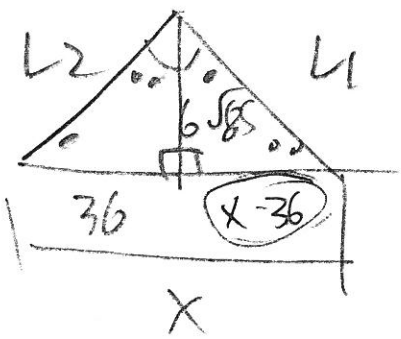
$$11x = 396 - 121$$

$$11x = 275$$

$$x = \frac{275}{11} = 25$$

$$x = 25$$

18



$$\frac{x-36}{6\sqrt{85}} = \frac{6\sqrt{85}}{36}$$

$$(x-36)36 = (6\sqrt{85})^2$$

$$36x - 1296 = 36 \cdot 85$$

$$36x - 1296 = 3060$$

$$+1296 \quad +1296$$

---


$$36x = 4356$$

$$\frac{36x}{36} = \frac{4356}{36}$$

$$x = 121$$