

Square Roots

Jan 7/16

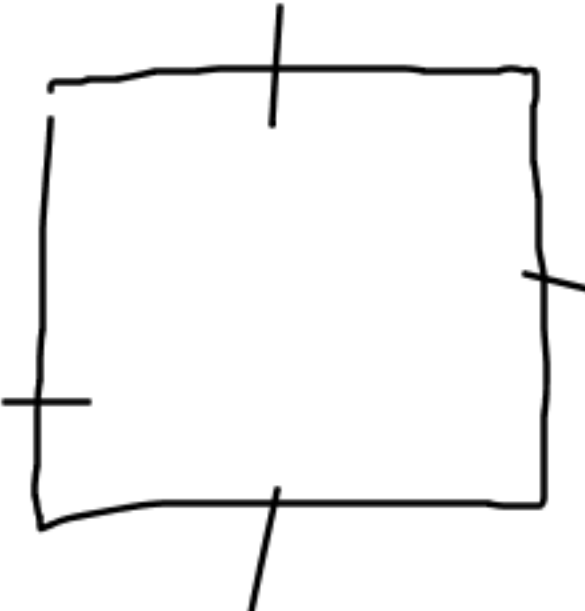
p. 149

$$\begin{aligned} 37) \quad & \sqrt{31} \\ &= 5.56 \\ &= 5.6 \end{aligned}$$

$$\begin{aligned} 39) \quad & \sqrt{62} \\ &= 7.87 \\ &= 7.9 \end{aligned}$$

$$\begin{aligned} 47) \quad & \sqrt{3} + \sqrt{7} \\ &= 1.73 + 2.65 \\ &= 4.37 \\ &= 4.4 \end{aligned}$$

$$\begin{aligned} 5a) & \quad 2\sqrt{12} - 8 \\ &= 2(3.\underline{46}) - 8 \\ &= 2(3.5) - 8 \\ &= 7 - 8 \\ &= -1 \end{aligned}$$

59) a) 

$$A = 25 \text{ cm}^2$$

$$A = s \times s$$

$$25 = s \times s$$

$$P = s + s + s + s$$

OR

$$4(s)$$

$$= 5 + 5 + 5 + 5$$

OR

$$4(5)$$

$$= 20 \text{ cm}$$

$$s = \sqrt{25}$$

$$s = 5 \text{ cm}$$

∴ Each side is 5 cm, and
 $P = 20 \text{ cm}$

$$\text{let) } a \sqrt{4a + 2b}$$

$$= \sqrt{4(5) + 2(-2)}$$

$$= \sqrt{20 - 4}$$

$$= \sqrt{16}$$

$$= 4$$

$$a = 5$$

$$b = -2$$

$$b \pm \sqrt{(ab)^2}$$

$$= - \sqrt{[(5)(-2)]^2}$$

$$= - \sqrt{(-10)^2}$$

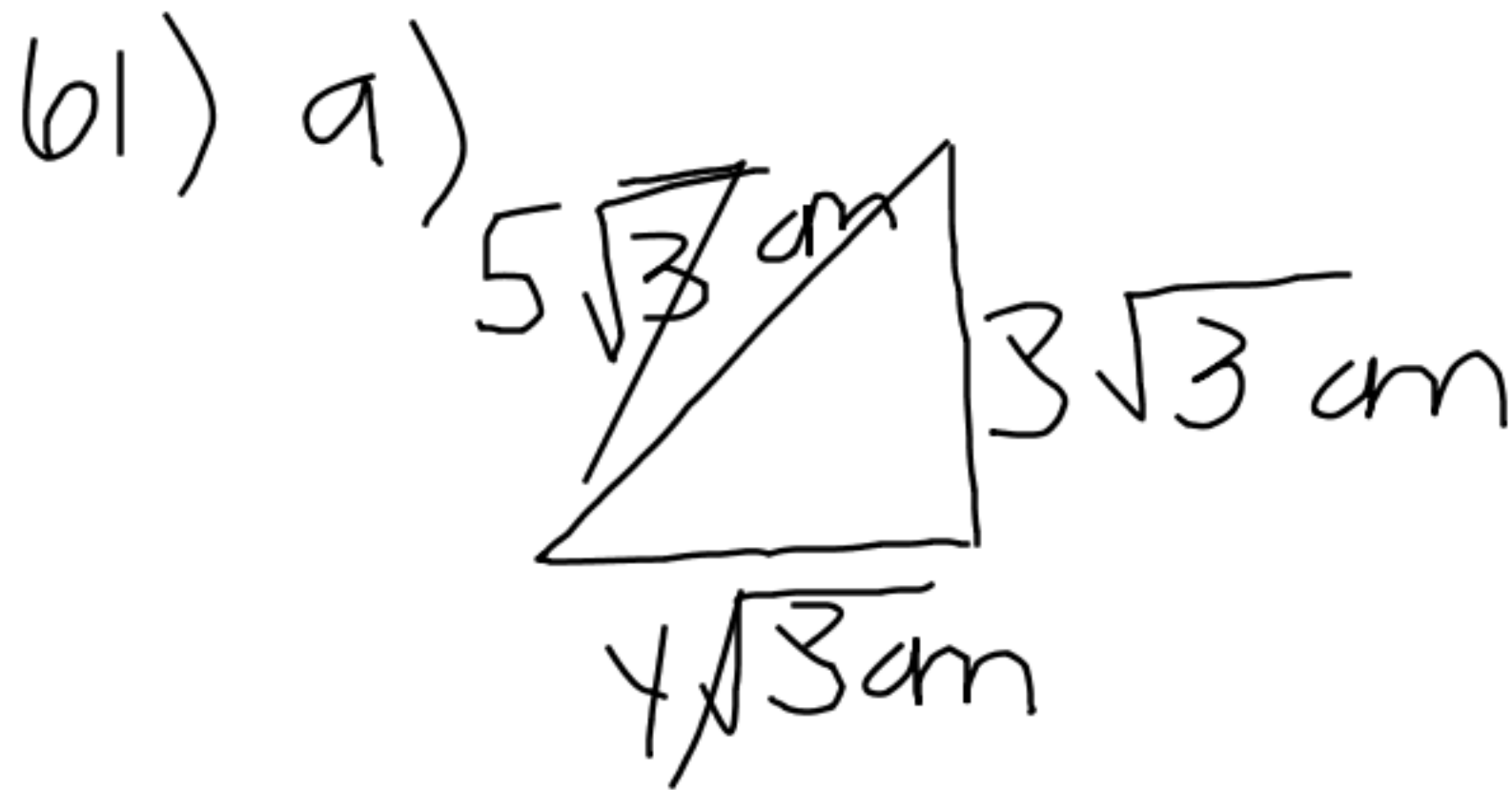
$$= - \sqrt{100}$$

$$= -1(10)$$

$$= -10$$

$$a = 5$$

$$b = -2$$



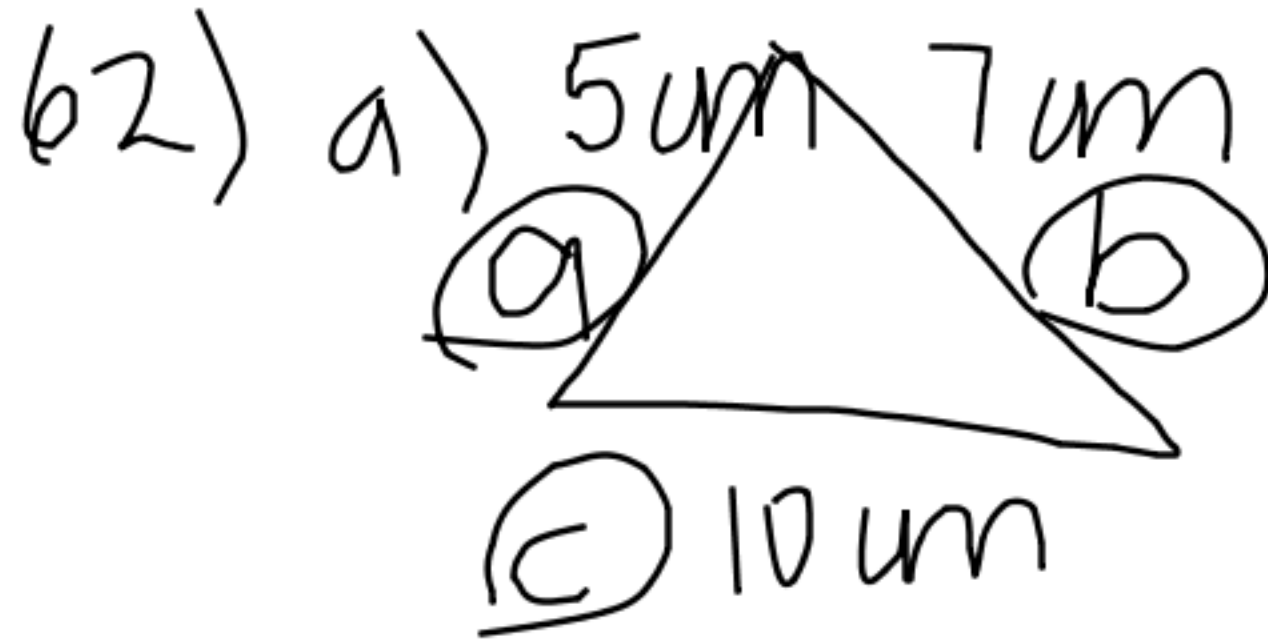
$$P = 5 + 5 + 5$$

$$P = 5 + 4 + 3$$

$$P = 12\sqrt{3}$$

$$P = 12(1.73)$$

$$P = 20.4 \text{ cm}$$



$$S = \frac{a+b+c}{2}$$

$$= \frac{5+7+10}{2}$$

$$A = \sqrt{s(s-a)(s-b)(s-c)}$$

$$= \frac{22}{2}$$

$$= \sqrt{11(11-5)(11-7)(11-10)}$$

$$s = 11$$

$$= \sqrt{11(6)(4)(1)}$$

$$= \sqrt{264}$$

$$= 16.248$$

$$= 16.25$$

$$= 16.3 \text{ cm}^2$$

Homework

p. 146-151

43-46, 48, 50, 54,
55, 59 df, 60 bdfgi,
62 cd