

## IM1H Book 1 Selected Answers

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1. (a)  $A_{ABCD} = 25$ ,  $A_{BCEF} = 9$   
(b) –  
(c) –  
(d)  $A = 34$   
(e)  $l = \sqrt{34}$   
(f) –
2.  $l = 4\sqrt{5}$
3. Yes
4. –
5. –
6.  $AB = \sqrt{41}$
7.  $l = 5\sqrt{2}$
8.  $l = \sqrt{5}$ , No
9. 12
10.  $(12, 2), (2, 2)$
11. No
12.  $d = 10\sqrt{2}$
13. (a)  $C = (5, 0)$ . Answers may vary.  
(b)  $D = (5, 1)$ . Answers may vary.  
(c)  $x = 5$   
(d) –
14. (a) 13, 17, 13, 17  
(b) –

15. (a)  $AP = BP = 2\sqrt{5}$   
(b)  $(3, 5), (2, 2), (4, 8)$ . Answers may vary.  
(c) No  
(d)  $y = 3(x - 2) + 2$
16.  $(10, 3), (-6, 3)$
17.  $-$
18. (a)  $(0, 0), (6, 0)$ . Answers may vary.  
(b)  $(0, 4), (4, 2)$ . Answers may vary.  
(c)  $(0, 4), (2, 2)$ . Answers may vary.
19.  $AB = BC = \sqrt{10}$
20.  $C = (6, 3)$ . Infinite. Answers may vary for  $C$ .