Final Exam Option 2 Answers

Multiple Choice and Numerical Response Answers

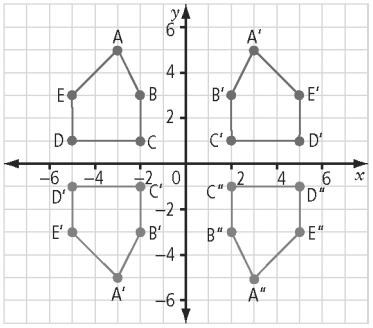
1. A
2. D
3. IV or 4
4. B
5. D
6. B
7. B
8. 24
9. D
10. B
11. 43°
12. C
13. B
14. B
15. D
16. B
17. D
18. A
19. A
20. C
21. C
22. A
23. B
24. C
25. C
26. D
27. 82°
28. D
29. D
30. C
31. A
32. 0.25
33. B
34. B
35. C
36. B
37. A
38. A
39. C
40. A
41. A
42. C
43. C
44. B
45. A
46. A
47. 16
48. 3.14
49. 3.85
50. B
51. C
52. C
53. B
54. D
55. D
56. A
57. B
58. D
59. 2; 4; 1; 3
60. B

Written Response Answers

1. a) Translation or slide

b) Examples:
- It was a translation 6 units right and 2 units down.
- $(x + 6, y - 2)$

c) Both Aniceto and Maria are correct.



d) Yes, pentagon ABCDE could be rotated about (0, 0) 180º clockwise or counterclockwise.

2. a) $C = 2 \times \pi \times r$
$C \approx 2 \times 3.14 \times 7$
$C \approx 43.96$
$C \approx 44$ cm

b) $A = b \times h \div 2$
$A = 10 \times 10 \div 2$
$A = 50$ cm^2

c) Area of square:
$A = s \times s$
$A = 10 \times 10$
$A = 100$ cm^2
$100 - 50 = 50$ cm^2

d) 150 ÷ 10 = 15
75 ÷ 10 = 7.5, which means seven complete sides for the squares
15 × 7 = 105 squares

e) Number of packages:
Circumference = 44 cm
or approximately 40 cm
15 circles are approximately 20 circles.
40 × 20 = 800 cm
$\frac{800}{100}$ = 8 packages
Cost: $1.29 is approximately $1.
8 × 1 = $8

f) Number of packages:
Circumference = 44 cm
15 circles
44 × 15 = 660 cm
$\frac{660}{100}$ = 6.6 packages
Need to round up to 7 packages.
Cost: 7 × 1.29 = $9.03

3. a) Mean: 18 + 20 + 18 + 19 + 20 = 95;
95 ÷ 5 = 19
Median: 19

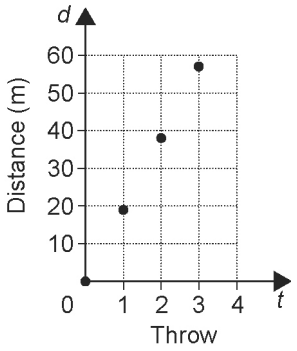
b) 95 + 19 + 19 = 133. Yes, he will meet his goal of 130 m.

c) $d = 19t$

d)

t	***d***
0	0
1	19
2	38
3	57

e)



4. a) +5 + (−10)

b) +5 − 10

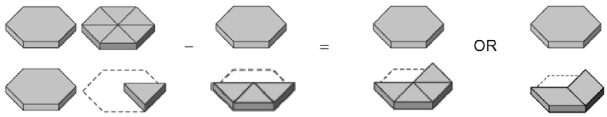
c) −5

d) Three x subtract four equals negative ten.

e)
$3x - 4 = -10$
$3x - 4 + 4 = -10 + 4$
$3x = -6$
$x = -2$

f) $3\frac{1}{6} - 1\frac{1}{2}$

g)



h) $3\frac{1}{6} - 1\frac{1}{2} = 3\frac{1}{6} - 1\frac{3}{6}$
$= 2\frac{7}{6} - 1\frac{3}{6}$
$= 1\frac{4}{6}$ or $1\frac{2}{3}$