

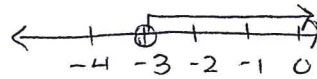
IB Math Studies  
Prior Learning  
KEY

1. 15
2. 62
3.  $8\frac{1}{3}$
4. -84
5. 3,150
6. \$49.60
7. 35%
8. ¥40
9. -0.14, -0.073, 0.0332, 0.1569, 6.3
10.  $\frac{1}{6}, \frac{1}{3}, \frac{7}{13}, \frac{3}{5}, \frac{5}{4}$
11. 962.5 feet
12. 3:4
13. False;  $|4| = 4$
14. True
15. False;  $|-4| = 4$
16. (3, 4)
17. (-2, -3)
18. (3, -2) ← intersection point
19.  $(x+6)(x-3) \rightarrow x = -6 \text{ and } 3$
20.  $(x-2)(3x+4) \rightarrow x = 2 \text{ and } -\frac{4}{3}$
21.  $(4x+3)(4x-3) \rightarrow x = \pm \frac{3}{4}$
22.  $x = \frac{3}{2} \text{ and } -\frac{1}{3}$
23.  $12x^2 - 42x$
24.  $x^2 - 12x + 36$
25.  $6x^2 + 11x - 35$
26.  $x = -4$
27.  $x = \frac{5}{9}$
28.  $x = 5\frac{2}{3}$
29.  $m > -3$
30.  $x \leq 2$
31.  $C = \frac{5}{9}(F - 32)$
32.  $r = \sqrt{\frac{A}{\pi}}$
33. LCM: 110; HCF: 5
34. LCM: 210; HCF: 7
35. >
36. <
37. QII
38. QIII
39. 8 yd
40. 192 cm<sup>2</sup>
41. 58 m
42. 144 m<sup>2</sup>
43.  $8\pi \text{ in} = 25.1 \text{ in}$
44.  $144 - 16\pi \text{ in}^2 = 93.7 \text{ in}^2$
45. (4.5, -10)
46. (-5, -3)
47. 10

48. 5
49.  $y = 5x - 3$
50.  $y = \frac{3}{4}x - 9$
51.  $y = \frac{3}{2}x + 11$
52.  $y = \frac{2}{5}x + 1$
53.  $\frac{x^{44}}{y^8}$
54.  $\frac{-3s^5}{t^6}$
55.  $\frac{4}{a^6b^{18}}$
56.  $\frac{m^{12}}{25n^6}$
57.  $-6\sqrt{2}$
58.  $19\sqrt{3}$
59.  $-4\sqrt{5}$
60.  $8\sqrt{3}$

61.  $8.58 \times 10^6$
62.  $8.4 \times 10^{-7}$
63. 79,000
64. 0.0000452

29. Graph:



30. Graph:

