

Math 9 Midyear Review
Answer Section**MULTIPLE CHOICE**

1. C
2. C
3. A
4. A
5. B
6. D
7. B
8. A
9. C
10. C
11. D
12. A
13. B
14. C
15. C
16. B
17. D
18. C
19. B
20. A
21. C
22. C
23. B
24. D
25. B
26. C
27. D
28. D
29. B
30. D
31. B
32. A
33. B
34. C
35. B
36. C
37. C
38. C

SHORT ANSWER

39. -1.7

40. a) $-\frac{18}{5} > -\frac{11}{3}$

b) $3\frac{3}{5} > 3\frac{7}{12}$

PROBLEM

41. Use the square root function on a calculator.

$$\sqrt{\frac{14.5}{3}} \doteq 2.2$$

$$\sqrt{\frac{13.5}{4}} \doteq 1.8$$

$$\sqrt{4.1} \doteq 2.0$$

$$\sqrt{3.7} \doteq 1.9$$

Since $1.8 < 1.9 < 2.0 < 2.2$, from least to greatest: $\sqrt{\frac{13.5}{4}}$, $\sqrt{3.7}$, $\sqrt{4.1}$, $\sqrt{\frac{14.5}{3}}$

$$\begin{aligned}
 42. \quad \frac{12^6 \times 12^3}{6^2 \times 6^7} &= \frac{12^{6+3}}{6^{2+7}} \\
 &= \frac{12^9}{6^9} \\
 &= \frac{(2 \times 6)^9}{6^9} \\
 &= \frac{2^9 \times 6^9}{6^9} \\
 &= 2^9 \\
 &= 512
 \end{aligned}$$