

Math 9 - Practice Test - Unit 2

Answer Section

MULTIPLE CHOICE

1. A
2. B
3. A
4. A
5. B
6. D
7. A
8. B
9. B
10. B
11. D
12. B
13. A
14. D
15. D

SHORT ANSWER

16. $10\,000\,000 = 10^7$
17. 4 400 400 is greater.
18. $7^6 \times 7^7 = 7^{13}$
19. 1458
20. $8^5 \div 9^5$, or $\frac{8^5}{9^5}$

PROBLEM

21. $2^4 \times 3^3 \times 5^2 = 16 \times 27 \times 25$
 $= 10\,800$

22. Errors:

In the numerator, follow the order of operations. Do the multiplication before the addition and subtraction.
In the denominator, the exponent 0 does not apply to everything in the brackets.

Correction:

$$\begin{aligned} & \frac{5^2 + 3 \times 4^2 - 3^2}{3^2 - (5 \times 4^0)} \\ &= \frac{25 + 3 \times 16 - 9}{9 - 5 \times 1} \\ &= \frac{25 + 48 - 9}{9 - 5} \\ &= \frac{64}{4} \\ &= 16 \end{aligned}$$