

Practice Placement Test Version Two

1. $|-65wz| =$

a) $65|w||z|$

b) $-65|w||z|$ and $65|w||z|$

c) $4225wz$

d) $-65|w||z|$

e) 0 and $65|w||z|$

2. $\frac{a}{10b} - \frac{a}{7b} =$

a) $-1190b$

b) $-\frac{3}{b}$

c) $\frac{3}{b}$

d) $3b$

e) $\frac{3}{b^2}$

3. $(-2729) + 6(800) =$

a) 1501

b) -1929

c) 2071

d) 2096

e) 129

4. If $0.03x = 18$ then

a) $x = 600$

b) $x = 6$

c) $x = 0.06$

d) $x = 17.97$

e) $x = 0.18$

5. $-6p - 3(q - 4) + 7 =$

a) $-6p - 3q + 19$

b) $-6p - 3q - 11$

c) $-4p + q + 3$

d) $19 - 3q$

e) $-6p - 3q + 5$

6. $-2(p - q) + 3p - 4q =$

a) $p - 2q$

b) $p - 5q$

c) $p - 6q$

d) $p + 2q$

e) p

7. If $f(x) = x^3 + 9$ then $f(x + h) =$

a) $x^3 + h^3 + 729$

b) $(x + h + 9)^3$

c) $x^3 + h + 9$

d) $(x + h)^3 + 9$

e) $x^3 + h^3 + 18$

8. $(125)^{\frac{2}{3}}(256)^{\frac{3}{4}} =$

a) 20

b) 320

c) 100

d) 4

e) 1600

9. $\frac{14}{14 + \frac{1}{2}} =$

a) $\frac{28}{15}$

b) 2

c) $\frac{2}{3}$

d) $\frac{13}{2}$

e) $\frac{28}{29}$

10. If $f(x) = \frac{x-9}{x+9}$ then $f(2) =$

a) -27

b) $\frac{7}{11}$

c) -7

d) $-\frac{7}{11}$

e) 11

11. $\left(\frac{2}{5}\right)^{-4} =$

a) $-\frac{16}{625}$

b) $-\frac{625}{16}$

c) $\frac{625}{16}$

d) $-\frac{2}{5}$

e) $\frac{5}{2}$

12. $\frac{21hk^4 + 3h^4k}{3hk} =$

a) $7k^3 + 3h^4k$

b) $21hk^4 + h^3$

c) $18h^3k^3$

d) $7k^3 + h^3$

e) 18

13. If $f(x) = x^3 - 5$ then $f(x + h) =$

a) $x^3 + h^3 - 125$

b) $(x + h - 5)^3$

c) $x^3 + h - 5$

d) $x^3 + h^3 - 10$

e) $(x + h)^3 - 5$

14. The graph of $7x - y + 28 = 0$ crosses the x -axis at $x =$

a) 4

b) 28

c) -28

d) 0

e) -4

15. The length L of a spring is given by $L = \frac{2}{3}F + 2$ where F is the applied force. What force F will produce a length L of 8 ?

a) 9

b) 15

c) $\frac{22}{3}$

d) $\frac{26}{3}$

e) 8

16. $(x^2 + x - 1)(x^2 + 3) =$

a) $2x^2 + x + 2$

b) $x^2 + x + 2$

c) $x^4 + x - 3$

d) $-3x^5$

e) $x^4 + x^3 + 2x^2 + 3x - 3$

17. $(8p^6 x^8)(-4p^7 x^2) =$

a) $-32 p^{42} x^{16}$

b) $-32 p^{13} x^{10}$

c) $4 p^{42} x^{16}$

d) $-\frac{32 x^6}{p}$

e) $\frac{4 x^6}{p}$

18. $\frac{y^2 - 8y + 12}{y^2 - 1} \cdot \frac{y + 1}{y^2 - 8y} =$

a) $\frac{y^2 - 8y + 12}{y^3 - 9y^2 + 8y}$

b) $\frac{y^2 - 8y + 12}{y^3 - 7y^2 - 8y}$

c) $\frac{y^2 - 8y + 12}{y^3 + 7y^2 - 8y}$

d) $\frac{y^2 - 8y + 12}{y^3 + 9y^2 + 8y}$

e) $\frac{y^2 + 4y - 12}{y^3 + 7y^2 - 8y}$

19. $\sqrt{50 p^{47} x^{17}} =$

a) $bx + 5x$

b) $5 p^{23} x^8 \sqrt{2 p x}$

c) $b\sqrt{6x}$

d) $\sqrt{6x}$

e) $\sqrt{26x}$

20. $-5 - [9(8 - 6) + 3] =$

a) -80

b) -20

c) -68

d) 16

e) -26

21. $\frac{4}{\sqrt{6}} =$

a) $\frac{2\sqrt{6}}{3}$

b) $\frac{\sqrt{6}}{4}$

c) $\frac{2}{\sqrt{3}}$

d) $\frac{\sqrt{3}}{2}$

e) $\sqrt{\frac{3}{2}}$

22. The solutions of $3x^2 - 2x - 8$ are

- a) 2 and $-\frac{4}{3}$
- b) 2 and $\frac{4}{3}$
- c) -2 and $\frac{4}{3}$
- d) -2 and $-\frac{4}{3}$
- e) 2 and -4

23. If $\frac{1}{2} + 3 = \frac{w}{2}$ then $w =$

- a) $-\frac{5}{2}$
- b) 4
- c) $\frac{5}{2}$
- d) $-\frac{7}{2}$
- e) $-\frac{7}{4}$

24. $1 - \frac{5}{4} =$

- a) $\frac{1}{2}$
- b) $\frac{1}{ab}$
- c) $-\frac{1}{4}$

d) $-\frac{1}{2}$

e) $\frac{16}{ab}$

25. $6^0 9^2 =$

a) 0

b) 18

c) 486

d) 2916

e) 81