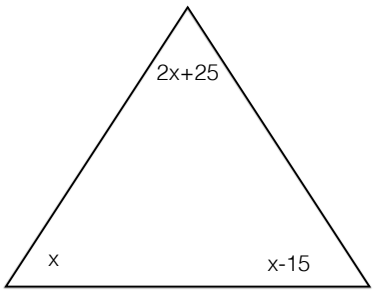
East Los Angeles College
Department of Mathematics
Math 115
Practice Test 3

Use properties of exponents to evaluate the following. Write as positive exponents:

1. $2x^3 \cdot 5x^2$
2. $\frac{25x^4}{5x^2}$
3. $(z^5)^4$
4. $(5x^4)^3$
5. 12345^0
6. 2^{-2}
7. 5^{-3}
8. 4^{-1}
9. $2x^3 \cdot 3x^{-4}$
10. $\frac{20x}{2x^4}$
11. $\frac{12x^{-2}}{3x}$
12. $\frac{16b^{-2}}{2a^{-1}b}$
13. $5xy^2 \cdot 2xy$
14. $\frac{28xy^3}{7x^2y}$
15. $6a^{-2}b \cdot 5ab^{-3}$
16. $\frac{6ab^{-2}}{3a^{-3}b}$
17. $(xy^4)^{-3}$
18. $(2x^3y)^2$

19. Determine the smallest angle.



20. Complementary Angles- Two angles are complementary. If one angle measures 20 degrees more than twice the other angle, what is the measure of the angles?

21. Rectangle- The perimeter of a rectangle is 120 meters. If the length is one more than three times the width, what are the dimensions (length and width)?

Expand the following.

22. 4.25×10^{7}

23. 6.24×10^{-6}

Write using Scientific Notation

24. $224{,}000{,}000{,}000$

25. $.0000000168$

Add or Subtract the following.

26. $(4x^2-2x-3)+(2x^2-6x+7)$

27. $(3x^2-2x-5)-(2x^2-5x+7)$