31) Simplify the following expression $(4x^3)^2$.

A) $4x^6$ B) $4x^5$ C) $16x^5$ D) $16x^6$

32) Find the difference of $-\frac{1}{2}-\frac{2}{3}-\left(-\frac{5}{8}\right)$.

A) $\frac{13}{24}$ B) $-\frac{13}{24}$ C) $\frac{2}{3}$ D) $-\frac{19}{24}$ E) $-1\frac{19}{24}$

33) Which number does $(7 + 1)^2 - 16 \div 2 + 6 \div 3$ equal?

A) $\frac{62}{3}$ B) $\frac{23}{3}$ C) 10 D) 2 E) 58

34) Evaluate the expression for the given values of x and y: $\frac{(x+3)^2}{3y-2}$ when x = 2 and y = 4.

A) $\frac{18}{5}$ B) $\frac{5}{2}$ C) $\frac{25}{6}$ D) $\frac{6}{5}$

35) The length of a rectangle is five less than four times the width of the rectangle. Find the width of the rectangle if the perimeter is 230 inches.

A) 12 inches B) 23.5 inches
C) 24 inches D) 91 inches

36) At the start of the month the counter on the copy machine reads 7,634. At the end of the month it reads 72,584. If copies cost $1\frac{1}{2}$ cents a piece, what was the approximate cost for copies this month?

A) \$1,090.00 B) \$1,200.00
C) \$ 960.00 D) \$ 975.00

37) The prom committee has a budget of \$12,300 from which to spend money for the junior prom. It will cost them \$8,500 to rent the location and \$2,700 total for the DJ and the decorations. If there are 462 students attending the prom, what is the approximate cost of a prom favor is the prom committee breaks even at the end of all of their expenses, assuming that their only expenses are the location, DJ, decorations, and favors?

A) \$2.38 B) \$2.30 C) \$2.40 D) \$2.37

38) A group of eight kids went to dinner and their total bill is \$112.34. They decide to give their waitress a 15% tip. Approximately how much should each person contribute to the cost of the bill plus the tip?

A) \$14.25 B) \$14.04 C) \$16.15 D) \$21.06

39) Two angles, angle 7 and angle 8, are both complementary to angle 9. If the measure of angle 7 is 61°, what is the measure of angle 8?

A) 29° B) 61° C) 90° D) 119° E) 180°

40) Two angles, angle PQR and angle RQS form a linear pair. If the measure of angle PQR is 48°, what is the measure of RQS?

A) 42° B) 48° C) 90° D) 132° E) 180°