

Student Name _____
 Parent Sign _____

Pre-Alg.
 Ch. 4
 Review

- 1) 126 (A)
 2) ones digit div. by 2
 3) $1+2+6=9$ (div. by 3)
 * last 2 digits (26) not div. by 4
 5) ones not 0 or 5
 6) 2, 3 are both true
 * - ones not 0

- 2) monomial is:
 1) number
 2) variable
 3) product num/var
 (B) $7(x+y)$
 addition
 not monomial

3) $(y)(y)(y)(y)(y)$
 y^5 (D)

4) $3m^2$
 $3(5)^2$
 $3(25)$
 75 (C)
 $5^2 = 5 \cdot 5 = 25$

5) 36
 $6 \cdot 6$
 $2 \cdot 3 \cdot 2 \cdot 3$
 $2 \cdot 2 \cdot 3 \cdot 3$
 (D)

6) $20x^2y$
 $2 \cdot 10$
 $2 \cdot 5$
 $2 \cdot 2 \cdot 5 \cdot x \cdot x \cdot y$
 (A)

7) $14x = 2 \cdot 7 \cdot x$
 $35x^2 = 5 \cdot 7 \cdot x \cdot x$
 GCF = $7 \cdot x$
 $7x$
 (B)

14
 35
 $2 \cdot 7$
 $5 \cdot 7$

Do GCF 1st
 $5 = 5$
 $10 = 2 \cdot 5$
 GCF = 5

8) $5 + 10y$
 $5(1) + 5(2y)$
 $5(1 + 2y)$
 (C)

9) $\frac{35}{77} = \frac{5 \cdot 7}{7 \cdot 11} = \frac{5}{11}$
 $35 = 5 \cdot 7$
 $77 = 7 \cdot 11$
 (A)

10) $\frac{20ab^2}{50ab} = \frac{2 \cdot 2 \cdot 5 \cdot a \cdot b \cdot b}{2 \cdot 5 \cdot 5 \cdot a \cdot b} = \frac{2b}{5}$
 (D)

Recall:
 $1m = 100cm$
 11) $\frac{20}{100} = \frac{2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 5 \cdot 5} = \frac{1}{5}$
 (A)

$20 = 2 \cdot 2 \cdot 5$
 $50 = 2 \cdot 5 \cdot 5$

$100 = 2 \cdot 2 \cdot 5 \cdot 5$
 $10 = 2 \cdot 5$

12) $8^4 \cdot 8^4$
 8^{4+4}
 8^8
 (B)

13) $4x^2 \cdot 5x^4$
 $(4 \cdot 5)(x^2 \cdot x^4)$
 $20x^{2+4}$
 $20x^6$
 (C)

14) $\frac{3^5}{3^5}$
 3^{5-5}
 3^0
 (A)

15) $\frac{4^6}{4^2}$
 4^{6-2}
 4^4
 (C)

$$16) \frac{1}{5^6} = 5^{-6}$$

(B)

$$17) 6^{-3}$$

$$3^{-3} = \frac{1}{3^3} = \frac{1}{3 \cdot 3 \cdot 3} = \frac{1}{27}$$

(A)

$$18) 2^2$$

$$2^{-2} = \frac{1}{2^2} = \frac{1}{2 \cdot 2} = \frac{1}{4}$$

(B)

$$19) 7.5 \times 10^{-4}$$

0.00075
neg = left

.00075 (D)

$$20) 2.7 \times 10^4$$

1.4×10^5 (B)

Bonus

Venus	7.52×10^3
Earth	7.93×10^3
Neptune	3.08×10^4
Uranus	3.18×10^4