

Name _____

Date _____



GREATEST COMMON FACTOR SHEET 6B

For each problem below, write out the lists of factors to find the GCF.

1) Find the greatest common factor of 24, 36, and 42.

Prime Factorization of 24:

Prime Factorization of 36:

Prime Factorization of 42:

- $GCF(24, 36, 42) =$ _____.

2) Find the greatest common factor of 44, 55, and 22.

Prime Factorization of 44:

Prime Factorization of 55:

Prime Factorization of 22:

- $GCF(44, 55, 22) =$ _____.

3) Find the greatest common factor of 56, 32, and 48.

Prime Factorization of 56:

Prime Factorization of 32:

Prime Factorization of 48:

- $GCF(32, 56, 48) =$ _____.

4) Find the greatest common factor of 75, 60, and 45.

Prime Factorization of 75:

Prime Factorization of 60:

Prime Factorization of 45:

- $GCF(60, 45, 75) =$ _____.





GREATEST COMMON FACTOR SHEET 6B ANSWERS

1) Find the greatest common factor of 24, 36, and 42.

Prime Factorization of 24: $\underline{2 \times 2 \times 2 \times 3}$ Prime Factorization of 36: $\underline{2 \times 2 \times 3 \times 3}$

Prime Factorization of 42: $\underline{2 \times 3 \times 7}$

- $GCF(24, 36, 42) = \underline{2 \times 3 = 6}$

2) Find the greatest common factor of 44, 55, and 22.

Prime Factorization of 44: $\underline{2 \times 2 \times 11}$ Prime Factorization of 55: $\underline{5 \times 11}$

Prime Factorization of 22: $\underline{2 \times 11}$

- $GCF(44, 55, 22) = \underline{11}$

3) Find the greatest common factor of 56, 32, and 48.

Prime Factorization of 56: $\underline{2 \times 2 \times 2 \times 7}$ Prime Factorization of 32: $\underline{2 \times 2 \times 2 \times 2 \times 2}$

Prime Factorization of 48: $\underline{2 \times 2 \times 2 \times 2 \times 3}$

- $GCF(32, 56, 48) = \underline{2 \times 2 \times 2 = 8}$

4) Find the greatest common factor of 75, 60, and 45.

Prime Factorization of 75: $\underline{3 \times 5 \times 5}$ Prime Factorization of 60: $\underline{2 \times 2 \times 3 \times 5}$

Prime Factorization of 45: $\underline{3 \times 3 \times 5}$

- $GCF(60, 45, 75) = \underline{3 \times 5 = 15}$