Fractions Ex 6.6 Q2

Answer :

(i) $\frac{75}{80}$

Factors of 75 are 1, 3, 5, 15, 25 and 75.
Factors of 80 are 1, 2, 4, 5, 8, 10, 16, 20, 40 and 80.
Common factors of 75 & 80 are 1 & 5.
HCF of 75 & 80 is 5.
Dividing both the numerator & denominator by 5, we get :

$\frac{75 \div 5}{80 \div 5} = \frac{15}{16}$

(ii) $\frac{52}{76}$

Factors of 52 are 1, 2, 4, 13, 26 and 52.
Factors of 76 are 1, 2, 4, 19, 38 and 76.
Common factors of 52 & 76 are 1, 2 and 4.
HCF of 52 and 76 is 4.
Dividing both the numerator and denominator by 4, we get :

$\frac{52 \div 4}{76 \div 4} = \frac{13}{19}$

(iii) $\frac{84}{98}$

Factors of 84 are 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42 and 84.
Factors of 98 are 1, 2, 7, 14, 49 and 98.
Common factors of 84 and 98 are 1, 2, 7 and 14.
HCF of 84 and 98 is 14.
Dividing both the numerator and denominator by 14, we get :

$\frac{84 \div 14}{98 \div 14} = \frac{6}{7}$

(iv) $\frac{68}{17}$

Factors of 68 are 1, 2, 4, 17, 34 and 68.
Factors of 17 are 1 and 17.
Common factors of 68 and 17 are 1 and 17.
HCF of 68 and 17 is 17.
Dividing both the numerator and denominator by 17, we get :

$\frac{68 \div 17}{17 \div 17} = \frac{4}{1}$

(v) $\frac{150}{50}$

Factors of 150 are 1, 2, 3, 5, 6, 10, 15, 25, 50 and 150.
Factors of 50 are 1, 2, 5, 10, 25 and 50.
Common factors of 150 and 50 are 1, 2, 5, 10, 25 and 50.
Dividing both the numerator and denominator by 50, we get :

$\frac{150 \div 50}{50 \div 50} = \frac{3}{1}$

(vi) $\frac{162}{108}$

Factors of 162 are 1, 2, 3, 6, 9, 18, 27, 54, 81 and 162.

Factors of 108 are 1, 2, 3, 4, 6, 9, 12, 18, 27 and 54.

Common factors of 162 and 108 are 1, 2, 3, 6, 9, 18, 27 and 54.

HCF of 162 and 108 is 54.

Dividing both the numerator and denominator by 54, we get :

$\frac{162 \div 54}{108 \div 54} = \frac{3}{2}$

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