Estimating Multiplication of Fractions

Name:

Determine the answer using estimation.

When multiplying a fraction and a whole number you can estimate the answer by remembering that the fraction is just part of a number.

$5 \times 6\,{}^{2}/_{3} =$

In the example above, $6\,{}^{2}/_{3}$ is larger than 6 but less than 7. So we know the answer is going to be between 5×6 and 5×7.

$5 \times 6\,{}^{2}/_{3} = 33\,{}^{1}/_{3}$

The actual answer is $33\,{}^{1}/_{3}$ which is between 5×6 (30) and 5×7 (35).

1) $5 \times 8\,{}^{2}/_{3} =$ A. $49\,{}^{2}/_{3}$ B. $37\,{}^{1}/_{3}$ C. $47\,{}^{1}/_{3}$ D. $43\,{}^{1}/_{3}$

2) $5\,{}^{2}/_{6} \times 4 =$ A. $27\,{}^{2}/_{6}$ B. $21\,{}^{2}/_{6}$ C. $16\,{}^{2}/_{6}$ D. $26\,{}^{2}/_{6}$

3) $2 \times 3\,{}^{6}/_{8} =$ A. $10\,{}^{6}/_{8}$ B. $7\,{}^{4}/_{8}$ C. $2\,{}^{6}/_{8}$ D. $12\,{}^{6}/_{8}$

4) $7\,{}^{3}/_{5} \times 4 =$ A. $36\,{}^{3}/_{5}$ B. $34\,{}^{3}/_{5}$ C. $30\,{}^{2}/_{5}$ D. $25\,{}^{3}/_{5}$

5) $9 \times 9\,{}^{1}/_{4} =$ A. $93\,{}^{1}/_{4}$ B. $83\,{}^{1}/_{4}$ C. $99\,{}^{1}/_{4}$ D. $79\,{}^{1}/_{4}$

6) $5\,{}^{1}/_{9} \times 9 =$ A. $57\,{}^{1}/_{9}$ B. 42 C. 46 D. 63

7) $3\,{}^{5}/_{9} \times 6 =$ A. $16\,{}^{5}/_{9}$ B. $15\,{}^{3}/_{9}$ C. $21\,{}^{3}/_{9}$ D. $15\,{}^{5}/_{9}$

8) $5\,{}^{1}/_{10} \times 2 =$ A. $15\,{}^{2}/_{10}$ B. $10\,{}^{2}/_{10}$ C. $14\,{}^{2}/_{10}$ D. $16\,{}^{1}/_{10}$

9) $9 \times 8\,{}^{1}/_{3} =$ A. 84 B. $70\,{}^{1}/_{3}$ C. 63 D. 75

10) $5 \times 4\,{}^{7}/_{8} =$ A. $17\,{}^{7}/_{8}$ B. $28\,{}^{7}/_{8}$ C. $17\,{}^{3}/_{8}$ D. $24\,{}^{3}/_{8}$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Estimating Multiplication of Fractions Name: **Answer Key**

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Answers

1. D
2. B
3. B
4. C
5. B
6. C
7. C
8. B
9. D
10. D
11. B
12. C

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								