



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $10 \div 3 =$ _____

2) $\frac{1}{8} =$ _____

3) $\frac{16}{20} =$ _____

4) $102 \div 19 =$ _____

5) $\frac{2}{17} =$ _____

6) $288 \div 27 =$ _____

7) $\frac{11}{13} =$ _____

8) $\frac{6}{16} =$ _____

9) $196 \div 30 =$ _____

10) $\frac{21}{24} =$ _____

11) $101 \div 15 =$ _____

12) $243 \div 26 =$ _____

13) $45 \div 18 =$ _____

14) $84 \div 22 =$ _____

15) $144 \div 14 =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1190476$$

Answers

1) $10 \div 3 =$ 3

2) $\frac{1}{8} =$ $2 \times 2 \times 2$

3) $\frac{16}{20} =$ 5

4) $102 \div 19 =$ 19

5) $\frac{2}{17} =$ 17

6) $288 \div 27 =$ 3

7) $\frac{11}{13} =$ 13

8) $\frac{6}{16} =$ $2 \times 2 \times 2$

9) $196 \div 30 =$ 3×5

10) $\frac{21}{24} =$ $2 \times 2 \times 2$

11) $101 \div 15 =$ 3×5

12) $243 \div 26 =$ 2×13

13) $45 \div 18 =$ 2

14) $84 \div 22 =$ 11

15) $144 \div 14 =$ 7

1. R

2. T

3. T

4. R

5. R

6. R

7. R

8. T

9. R

10. T

11. R

12. R

13. T

14. R

15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

- 1) $\frac{2}{5} =$ _____
- 2) $47 \div 9 =$ _____
- 3) $141 \div 16 =$ _____
- 4) $108 \div 11 =$ _____
- 5) $\frac{9}{17} =$ _____
- 6) $\frac{12}{28} =$ _____
- 7) $\frac{8}{20} =$ _____
- 8) $\frac{2}{26} =$ _____
- 9) $7 \div 2 =$ _____
- 10) $151 \div 30 =$ _____
- 11) $\frac{10}{12} =$ _____
- 12) $\frac{12}{13} =$ _____
- 13) $\frac{4}{14} =$ _____
- 14) $92 \div 21 =$ _____
- 15) $10 \div 4 =$ _____

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



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

Answers

1) $\frac{2}{5} =$ 5

2) $47 \div 9 =$ 3x3

3) $141 \div 16 =$ 2x2x2x2

4) $108 \div 11 =$ 11

5) $\frac{9}{17} =$ 17

6) $\frac{12}{28} =$ 7

7) $\frac{8}{20} =$ 5

8) $\frac{2}{26} =$ 13

9) $7 \div 2 =$ 2

10) $151 \div 30 =$ 2x3x5

11) $\frac{10}{12} =$ 2x3

12) $\frac{12}{13} =$ 13

13) $\frac{4}{14} =$ 7

14) $92 \div 21 =$ 3x7

15) $10 \div 4 =$ 2

1. T

2. R

3. T

4. R

5. R

6. R

7. T

8. R

9. T

10. R

11. R

12. R

13. R

14. R

15. T



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $31 \div 3 =$ _____

2) $\frac{1}{2} =$ _____

3) $107 \div 28 =$ _____

4) $\frac{4}{7} =$ _____

5) $\frac{5}{13} =$ _____

6) $\frac{7}{22} =$ _____

7) $153 \div 25 =$ _____

8) $271 \div 26 =$ _____

9) $99 \div 24 =$ _____

10) $\frac{7}{12} =$ _____

11) $\frac{1}{4} =$ _____

12) $166 \div 27 =$ _____

13) $\frac{7}{8} =$ _____

14) $\frac{7}{15} =$ _____

15) $\frac{16}{23} =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

1) $31 \div 3 =$ 3

2) $\frac{1}{2} =$ 2

3) $107 \div 28 =$ $2 \times 2 \times 7$

4) $\frac{4}{7} =$ 7

5) $\frac{5}{13} =$ 13

6) $\frac{7}{22} =$ 2×11

7) $153 \div 25 =$ 5×5

8) $271 \div 26 =$ 2×13

9) $99 \div 24 =$ $2 \times 2 \times 2$

10) $\frac{7}{12} =$ $2 \times 2 \times 3$

11) $\frac{1}{4} =$ 2×2

12) $166 \div 27 =$ $3 \times 3 \times 3$

13) $\frac{7}{8} =$ $2 \times 2 \times 2$

14) $\frac{7}{15} =$ 3×5

15) $\frac{16}{23} =$ 23

Answers

1. R

2. T

3. R

4. R

5. R

6. R

7. T

8. R

9. T

10. R

11. T

12. R

13. T

14. R

15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

- 1) $\frac{18}{27} =$ _____
- 2) $\frac{3}{8} =$ _____
- 3) $196 \div 24 =$ _____
- 4) $\frac{10}{28} =$ _____
- 5) $71 \div 22 =$ _____
- 6) $82 \div 14 =$ _____
- 7) $60 \div 21 =$ _____
- 8) $\frac{3}{5} =$ _____
- 9) $15 \div 4 =$ _____
- 10) $\frac{1}{2} =$ _____
- 11) $33 \div 7 =$ _____
- 12) $\frac{4}{6} =$ _____
- 13) $\frac{14}{30} =$ _____
- 14) $\frac{2}{17} =$ _____
- 15) $80 \div 9 =$ _____

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



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

- 1) $\frac{18}{27} = \underline{3}$
- 2) $\frac{3}{8} = \underline{2 \times 2 \times 2}$
- 3) $196 \div 24 = \underline{2 \times 3}$
- 4) $\frac{10}{28} = \underline{2 \times 7}$
- 5) $71 \div 22 = \underline{2 \times 11}$
- 6) $82 \div 14 = \underline{7}$
- 7) $60 \div 21 = \underline{7}$
- 8) $\frac{3}{5} = \underline{5}$
- 9) $15 \div 4 = \underline{2 \times 2}$
- 10) $\frac{1}{2} = \underline{2}$
- 11) $33 \div 7 = \underline{7}$
- 12) $\frac{4}{6} = \underline{3}$
- 13) $\frac{14}{30} = \underline{3 \times 5}$
- 14) $\frac{2}{17} = \underline{17}$
- 15) $80 \div 9 = \underline{3 \times 3}$

Answers

1. R
2. T
3. R
4. R
5. R
6. R
7. R
8. T
9. T
10. T
11. R
12. R
13. R
14. R
15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $136 \div 19 =$ _____

2) $\frac{7}{26} =$ _____

3) $8 \div 3 =$ _____

4) $\frac{5}{23} =$ _____

5) $79 \div 13 =$ _____

6) $\frac{6}{12} =$ _____

7) $48 \div 21 =$ _____

8) $\frac{24}{27} =$ _____

9) $\frac{8}{29} =$ _____

10) $\frac{5}{30} =$ _____

11) $172 \div 28 =$ _____

12) $\frac{4}{10} =$ _____

13) $36 \div 11 =$ _____

14) $\frac{2}{8} =$ _____

15) $\frac{8}{16} =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

1) $136 \div 19 =$ 19

2) $\frac{7}{26} =$ 2×13

3) $8 \div 3 =$ 3

4) $\frac{5}{23} =$ 23

5) $79 \div 13 =$ 13

6) $\frac{6}{12} =$ 2

7) $48 \div 21 =$ 7

8) $\frac{24}{27} =$ 3×3

9) $\frac{8}{29} =$ 29

10) $\frac{5}{30} =$ 2×3

11) $172 \div 28 =$ 7

12) $\frac{4}{10} =$ 5

13) $36 \div 11 =$ 11

14) $\frac{2}{8} =$ 2×2

15) $\frac{8}{16} =$ 2

Answers

1. R

2. R

3. R

4. R

5. R

6. T

7. R

8. R

9. R

10. R

11. R

12. T

13. R

14. T

15. T



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $\frac{5}{23} =$ _____

2) $\frac{21}{25} =$ _____

3) $\frac{7}{13} =$ _____

4) $73 \div 30 =$ _____

5) $61 \div 7 =$ _____

6) $\frac{10}{24} =$ _____

7) $77 \div 8 =$ _____

8) $\frac{3}{4} =$ _____

9) $\frac{8}{9} =$ _____

10) $107 \div 15 =$ _____

11) $40 \div 6 =$ _____

12) $\frac{16}{29} =$ _____

13) $139 \div 22 =$ _____

14) $86 \div 26 =$ _____

15) $\frac{13}{21} =$ _____

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



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

- 1) $\frac{5}{23} =$ 23
- 2) $\frac{21}{25} =$ 5×5
- 3) $\frac{7}{13} =$ 13
- 4) $73 \div 30 =$ 2×3×5
- 5) $61 \div 7 =$ 7
- 6) $\frac{10}{24} =$ 2×2×3
- 7) $77 \div 8 =$ 2×2×2
- 8) $\frac{3}{4} =$ 2×2
- 9) $\frac{8}{9} =$ 3×3
- 10) $107 \div 15 =$ 3×5
- 11) $40 \div 6 =$ 3
- 12) $\frac{16}{29} =$ 29
- 13) $139 \div 22 =$ 2×11
- 14) $86 \div 26 =$ 13
- 15) $\frac{13}{21} =$ 3×7

Answers

1. R
2. T
3. R
4. R
5. R
6. R
7. T
8. T
9. R
10. R
11. R
12. R
13. R
14. R
15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $195 \div 30 =$ _____

2) $161 \div 18 =$ _____

3) $49 \div 24 =$ _____

4) $\frac{1}{2} =$ _____

5) $46 \div 22 =$ _____

6) $114 \div 11 =$ _____

7) $230 \div 28 =$ _____

8) $\frac{1}{3} =$ _____

9) $\frac{14}{21} =$ _____

10) $168 \div 17 =$ _____

11) $\frac{3}{4} =$ _____

12) $\frac{6}{10} =$ _____

13) $\frac{11}{25} =$ _____

14) $\frac{6}{9} =$ _____

15) $73 \div 12 =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

1) $195 \div 30 =$ 2

2) $161 \div 18 =$ $2 \times 3 \times 3$

3) $49 \div 24 =$ $2 \times 2 \times 2 \times 3$

4) $\frac{1}{2} =$ 2

5) $46 \div 22 =$ 11

6) $114 \div 11 =$ 11

7) $230 \div 28 =$ 2×7

8) $\frac{1}{3} =$ 3

9) $\frac{14}{21} =$ 3

10) $168 \div 17 =$ 17

11) $\frac{3}{4} =$ 2×2

12) $\frac{6}{10} =$ 5

13) $\frac{11}{25} =$ 5×5

14) $\frac{6}{9} =$ 3

15) $73 \div 12 =$ $2 \times 2 \times 3$

Answers

1. T

2. R

3. R

4. T

5. R

6. R

7. R

8. R

9. R

10. R

11. T

12. T

13. T

14. R

15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $\frac{7}{30} =$ _____

2) $\frac{12}{13} =$ _____

3) $182 \div 25 =$ _____

4) $\frac{4}{12} =$ _____

5) $\frac{24}{29} =$ _____

6) $201 \div 22 =$ _____

7) $82 \div 8 =$ _____

8) $\frac{2}{3} =$ _____

9) $51 \div 21 =$ _____

10) $\frac{6}{16} =$ _____

11) $255 \div 26 =$ _____

12) $\frac{1}{5} =$ _____

13) $\frac{3}{4} =$ _____

14) $148 \div 15 =$ _____

15) $\frac{18}{28} =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

1) $\frac{7}{30} =$ 2×3×5

2) $\frac{12}{13} =$ 13

3) $182 \div 25 =$ 5×5

4) $\frac{4}{12} =$ 3

5) $\frac{24}{29} =$ 29

6) $201 \div 22 =$ 2×11

7) $82 \div 8 =$ 2×2

8) $\frac{2}{3} =$ 3

9) $51 \div 21 =$ 7

10) $\frac{6}{16} =$ 2×2×2

11) $255 \div 26 =$ 2×13

12) $\frac{1}{5} =$ 5

13) $\frac{3}{4} =$ 2×2

14) $148 \div 15 =$ 3×5

15) $\frac{18}{28} =$ 2×7

Answers

1. R

2. R

3. T

4. R

5. R

6. R

7. T

8. R

9. R

10. T

11. R

12. T

13. T

14. R

15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $\frac{22}{27} =$ _____

2) $\frac{8}{28} =$ _____

3) $\frac{10}{20} =$ _____

4) $\frac{5}{16} =$ _____

5) $62 \div 13 =$ _____

6) $63 \div 6 =$ _____

7) $73 \div 11 =$ _____

8) $\frac{17}{29} =$ _____

9) $\frac{10}{19} =$ _____

10) $\frac{17}{24} =$ _____

11) $78 \div 15 =$ _____

12) $206 \div 21 =$ _____

13) $101 \div 10 =$ _____

14) $64 \div 7 =$ _____

15) $\frac{3}{26} =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.11\overline{90476}$$

1) $\frac{22}{27} =$ 3×3×3

2) $\frac{8}{28} =$ 7

3) $\frac{10}{20} =$ 2

4) $\frac{5}{16} =$ 2×2×2×2

5) $62 \div 13 =$ 13

6) $63 \div 6 =$ 2

7) $73 \div 11 =$ 11

8) $\frac{17}{29} =$ 29

9) $\frac{10}{19} =$ 19

10) $\frac{17}{24} =$ 2×2×2×3

11) $78 \div 15 =$ 5

12) $206 \div 21 =$ 3×7

13) $101 \div 10 =$ 2×5

14) $64 \div 7 =$ 7

15) $\frac{3}{26} =$ 2×13

Answers

1. R

2. R

3. T

4. T

5. R

6. T

7. R

8. R

9. R

10. R

11. T

12. R

13. T

14. R

15. R



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

Answers

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1\overline{190476}$$

1) $156 \div 16 =$ _____

2) $\frac{20}{29} =$ _____

3) $68 \div 25 =$ _____

4) $\frac{8}{11} =$ _____

5) $202 \div 20 =$ _____

6) $\frac{2}{3} =$ _____

7) $\frac{4}{23} =$ _____

8) $\frac{8}{9} =$ _____

9) $186 \div 24 =$ _____

10) $\frac{2}{6} =$ _____

11) $127 \div 26 =$ _____

12) $\frac{7}{21} =$ _____

13) $36 \div 17 =$ _____

14) $\frac{3}{4} =$ _____

15) $7 \div 2 =$ _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____



Determine if each problem when converted to a decimal will result in a repeating (R) or terminating (T) decimal.

A fraction will result in a **terminating** decimal if the prime factors of the simplified denominator contain only 2s or 5s (or only 2s and 5s).

$$\frac{6}{40} = \frac{3}{20} = 2 \times 2 \times 5 = 0.15$$

A fraction will result in a **repeating** decimal if the prime factors of the simplified denominator contain any prime factor other than 2 or 5.

$$\frac{5}{42} = 2 \times 3 \times 7 = 0.1190476$$

1) $156 \div 16 =$ 2x2

2) $\frac{20}{29} =$ 29

3) $68 \div 25 =$ 5x5

4) $\frac{8}{11} =$ 11

5) $202 \div 20 =$ 2x5

6) $\frac{2}{3} =$ 3

7) $\frac{4}{23} =$ 23

8) $\frac{8}{9} =$ 3x3

9) $186 \div 24 =$ 2x2

10) $\frac{2}{6} =$ 3

11) $127 \div 26 =$ 2x13

12) $\frac{7}{21} =$ 3

13) $36 \div 17 =$ 17

14) $\frac{3}{4} =$ 2x2

15) $7 \div 2 =$ 2

Answers

1. T

2. R

3. T

4. R

5. T

6. R

7. R

8. R

9. T

10. R

11. R

12. R

13. R

14. T

15. T