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Use a calculator to solve decimal problems, and solve common fraction problems by hand. Round off longer answers to two decimal places.

1. \[16.75 + 18.63\]
2. \[\frac{1}{3} + 2 \frac{1}{4}\]
3. \[71.56 \times 0.68\]
4. \[18.43 - 7.09\]
5. \[3 \frac{1}{3} \sqrt{2 \frac{2}{9}}\]
6. \[9.2 \times 3.5\]
7. \[12.6 - 9.04\]
8. \[\frac{1}{4} \times 2 \frac{3}{5}\]
9. \[1.287 + 0.94\]
New Skills Practice: Dividing Decimals; Factors and Prime Numbers

1. \(4.2 \sqrt{3}\)  
2. \(7\overline{22.47}\)  
3. \(9\overline{13.536}\)  

4. \(0.795 \sqrt{5}\)  
5. \(6\overline{0.528}\)  
6. \(0.204 \sqrt{3}\)  

7. \(34.7 \sqrt{4}\)  
8. \(11.53 \sqrt{5}\)  
9. \(8\overline{42.6}\)
Lesson 6 New Skills Practice (continued)

10. $9.240\sqrt{.3}$  
11. $.14\sqrt[7]{.7686}$  
12. $1.922\sqrt{.2}$

13. $9\sqrt{.5}$  
14. $145\sqrt{.4}$  
15. $1.6\sqrt{15}$

Write the factors of the following numbers.

16. 8  
17. 14  
18. 1

19. 24  
20. 10  
21. 7
Reduce all common fractions to lowest terms.

1. \(0.7 + 0.538\)  
2. \(6\sqrt{4.976}\)  
3. \(\frac{3}{4}\sqrt{2\frac{1}{2}}\)

4. \(8\sqrt{0.032}\)  
5. \(48\sqrt{2.4}\)  
6. \(4\sqrt{15.8}\)

7. \(\frac{7}{8} \times \frac{1}{3}\)  
8. \(5\sqrt{19.46}\)  
9. \(\frac{74.65}{8.3}\)
Lesson 6 Test (continued)

10. $14.32 - 0.587$

11. $15.68 \times 23$

12. $\sqrt{45}$

13. Mrs. Johnson drives to work every day. When she left for work one day, the odometer (mileage gauge) on her car read 38,643.8. When she returned to her house at the end of the day, the odometer read 38,668.6. If she didn’t drive anywhere else during the day but to work and back, how many miles is it from her house to her work?

14. Jason is buying a car, and he wants to pay for it in 48 monthly installments. If the total cost of the car is $9,300, how much would Jason have to pay each month?
Lesson 6 Test (continued)

15. Jennifer bought an axe at the hardware store. The axe cost $19.95 and the tax was $1.20. If she gave the clerk $25.00, how much change should she receive?

16. Rahima goes jogging on a course that is 2.75 kilometers long. If she completes the full course every morning, how many kilometers does she jog in one week?

Lesson 6 Learning Checklist

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Reduce all fractions to lowest terms.

1. $0.06 + 17.375$
2. $\frac{7}{8} \sqrt{1 \frac{1}{4}}$
3. $15.69 \times 24$

4. $9 \sqrt{0.036}$
5. $7.69 \times 0.4$
6. $9.6 - 1.308$

7. $40.6 \times 5.3$
8. $3 \frac{1}{8} \times 1 \frac{6}{10}$
9. $2 \sqrt{6.13}$
Lesson 7 Skills Check  (continued)

10. $6\sqrt{9.84}$

11. $5\sqrt{32.05}$

12. $0.286 \times 12$

13. On Saturday, Naomi drove 42.9 miles. On Sunday, she drove 28.7 miles. How many total miles did she drive on Saturday and Sunday?

14. Write $29 \frac{5}{10}$ as a decimal fraction.

15. Ibrahim bought a pair of pants, and the total came to $31.75. If he gave the clerk two $20 bills, how much change should he receive?

16. Write 15.75 as a common fraction.
Grade 7

New Skills Practice: Percentages, Simple and Compound Interest

1. \(7.902 \times 10\)

2. \(7.891 \times 100\)

3. \(5.732 \times 1000\)

4. \(290.7 \sqrt{10}\)

5. \(348.7 \sqrt{100}\)

6. \(169.2 \sqrt{1000}\)

7. How much is 25% of 600?

8. How much is 14% of 325?

9. 2% of 96 is how much?
Lesson 7 New Skills Practice (continued)

Convert the following decimals to percents and include the percent sign.

10. .79  13. .80
11. .548  14. 5.96
12. .6  15. .3

16. Samantha is interested in a stereo system that she saw at Stereo Warehouse. The system normally sells for $849, but it’s on sale for 20% off the regular price. How much will Susan save off the regular price if she buys during the sale?

17. Ellen goes to a exercise class every Wednesday night. 40% of the students in the class are men. If there are 30 students in the class, how many men are in Ellen’s exercise class?

18. 60% of the members of the Riverview Kiwanis Club voted for Jeff Bridges for President. If there were 75 members in the club, how many members voted for Jeff?
Reduce all common fractions to lowest terms.

1. $\frac{14.04}{0.6}$
2. $2^5$
3. $7 \sqrt[5]{1.435}$

4. $9(7.1 - 2.6)$
5. $\frac{3}{4} \times 3 \frac{1}{5}$
6. 5% of 240

7. $1.8 \sqrt[5]{428.4}$
8. $2^3 \sqrt[5]{\frac{4}{5}}$
9. $49 \sqrt{3}$
Lesson 7 Test (continued)

10. 12.5% of 86
11. $\times 4.2$
12. $10\left(\frac{1}{2} \cdot \frac{3}{4}\right)$

13. $18 - 6 \cdot 2 + 9 - 3(3)$
14. $25 - (6 + 3) + 8 \div 2 - (12 - 8)$

15. $3(4 + 2) - 6 + 5 \cdot 2 + (12 - 5)$
16. $4(8) - 16 + (6 + 2) - 18 + 3$
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