Guided Practice:

1. “Well, how far have we gone?” Frank, the head lineworker, asks Debra. Frank and his crew are conducting thermal inspections on transformer taps in a 1-mile-long section of a residential subdivision. “According to the GPS, we have traveled .35 miles in the first 2 hours,” Debra replies. What fraction of the residential subdivision section had the crew inspected in the first 2 hours?

A. 3/10

B. 17/50

C. 7/10

D. 7/20

2. Jane is performing oil level inspections on oil-fill substation transformers. The reading on the sight glass indicated 0.45 full. How would Jane report her findings as a fraction?

A. 9/10 full

B. 9/20 full

C. 4/10 full

D. 4/5 full

3. Mateo and the gas distribution crew have reported to a customer’s complaint of the smell of natural gas on a rural road. The crew is using a gas meter and has walked 0.12 miles of the 1-mile road. What portion of the road has Mateo’s crew inspected—in the form of a fraction in simplest form?

A. 12/10

B. 12/100

C. 6/50

D. 3/25

**Fractions to Decimals**

4. Gail and the line crew were pulling wire for a new subdivision. The crew had completed 5/6 of a mile of the 1-mile wire pull. How would the crew express how much line they completed in decimal form?

A. 8.33 miles

B. 0.0833 of a mile

C. 0.83 of a mile

D. 0.00833 of a mile

5. Romeo and his crew were assigned to inspect transformer taps after several failures had been reported in an area rebuilt after a winter storm. Romeo found that 1/5 of all the taps that had inspected were installed incorrectly. How would Romeo express the crew’s finding in decimal form?

A. 20% of the taps

B. 2.00 of the taps

C. 0.02 of the taps

D. 0.2 of the taps

6. Monika was assigned to patrol a 1-mile-long right-of-way to identify any damage to the electrical system after a thunderstorm. Monika had traveled about 1/8 of a mile before she was stopped by a large tree that had fallen across the electrical wires. How would Monika express the distance she had traveled as a decimal?

A. 0.125 of a mile

B. 1.25 miles

C. 12.5 miles

D. 1.25% miles

**Independent Practice:**

7. Ned is using a welding gage to read the depth of a root weld for welding two lengths of pipe together. Ned’s reading indicates 3/16 in of a root weld gap. How would Ned report his reading in a decimal?

A. 1.880 in

B. 0.1875 in

C. 0.0187 in

D. 0.0531 in

8. Bill is checking the current transformers on an industrial meter. The proper reading should be 1 ampere. Bill found that the current transformer was reading 0.90 amperes. How would Bill report his findings as a fraction of the proper reading of 1 ampere? Simplify fractions to lowest terms.

A. 9/10

B. 90/100

C. 9/100

D. 45/50

9. Martina is assigned to check gas meter calibrations at a housing complex. Martina found that 1/5 of the meters needed calibration. How would Martina report his findings as a decimal number?

A. 0.20 gas meters

B. 2.00 gas meters

C. 0.02 gas meters

D. 20% of the gas meters

10. Avery and the gas crew are installing 1 mile of new residential gas piping in a subdivision. The crew had completed 0.40 miles on the first day. What fraction of the project would Avery report to the supervisor is completed? Simplify fractions to lowest terms.

A. 40%

B. 4/10

C. 2/5

D. 40/50

11. Laurie is restocking the gas distribution trucks with pipe fusion fittings. She found that 2/3 of the trucks needed 1 inch butt fusion fittings. How would Laurie report her findings to her supervisor as a decimal number?

A. 667% of the trucks

B. 6.67 of the trucks

C. 0.6 of the trucks

D. 0.0667 of the trucks

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| **Answer Key:** |

1. “Well, how far have we gone?” Frank, the head lineworker, asks Debra. Frank and his crew are conducting thermal inspections on transformer taps in a 1-mile-long section of a residential subdivision. “According to the GPS, we have traveled .35 miles in the first 2 hours,” Debra replies. What fraction of the residential subdivision section had the crew inspected in the first 2 hours?

A. 3/10

B. 17/50

C. 7/10

**D. 7/20**

**.35=35/100**

**Divide both fractions by 5.**

**7/20**

2. Jane is performing oil level inspections on oil-fill substation transformers. The reading on the sight glass indicated 0.45 full. How would Jane report her findings as a fraction?

A. 9/10 full

**B. 9/20 full**

C. 4/10 full

D. 4/5 full

.45=45/100

Divide both the numerator and denominator by 5.

9/20

3. Mateo and the gas distribution crew have reported to a customer’s complaint of the smell of natural gas on a rural road. The crew is using a gas meter and has walked 0.12 miles of the 1-mile road. What portion of the road has Mateo’s crew inspected—in the form of a fraction in simplest form?

A. 12/10

B. 12/100

C. 6/50

**D. 3/25**

.12=12/100

Divide both numbers by 4.

3/25

**Fractions to Decimals**

4. Gail and the line crew were pulling wire for a new subdivision. The crew had completed 5/6 of a mile of the 1-mile wire pull. How would the crew express how much line they completed in decimal form?

A. 8.33 miles

B. 0.0833 of a mile

**C. 0.83 of a mile**

D. 0.00833 of a mile

To solve this problem, divide 5 by 6. Add a decimal after 5 and continue to add zeros until you realize that the 3 is repeating.

5. Romeo and his crew were assigned to inspect transformer taps after several failures had been reported in an area rebuilt after a winter storm. Romeo found that 1/5 of all the taps that had inspected were installed incorrectly. How would Romeo express the crew’s finding in decimal form?

A. 20% of the taps

B. 2.00 of the taps

C. 0.02 of the taps

**D. 0.2 of the taps**

To solve this problem, divide 1 by 5. Add a decimal after the one and continue to add zeros

6. Monika was assigned to patrol a 1-mile-long right-of-way to identify any damage to the electrical system after a thunderstorm. Monika had traveled about 1/8 of a mile before she was stopped by a large tree that had fallen across the electrical wires. How would Monika express the distance she had traveled as a decimal?

**A. 0.125 of a mile**

B. 1.25 miles

C. 12.5 miles

D. 1.25% miles

To solve this problem, divide 1 by 8. Add three zeros until you get .125.

**Independent Practice:**

Welder examples  
7. Ned is using a welding gage to read the depth of a root weld for welding two lengths of pipe together. Ned’s reading indicates 3/16 in of a root weld gap. How would Ned report his reading in a decimal?

A. 1.880 in

**B. 0.1875 in**

C. 0.0187 in

D. 0.0531 in

To solve this problem, divide 3 by 16. Add a decimal after the 3 and add 4 zeros until you get .1875.

8. Bill is checking the current transformers on an industrial meter. The proper reading should be 1 ampere. Bill found that the current transformer was reading 0.90 amperes. How would Bill report his findings as a fraction of the proper reading of 1 ampere? Simplify fractions to lowest terms.

**A. 9/10**

B. 90/100

C. 9/100

D. 45/50

To solve this problem, write 90/100. Reduce the fraction by dividing the numerator and denominator by 10. 90/10=9. 100/10=10. 9/10 is the answer.

9. Martina is assigned to check gas meter calibrations at a housing complex. Martina found that 1/5 of the meters needed calibration. How would Martina report his findings as a decimal number?

**A. 0.2 gas meters**

B. 2.00 gas meters

C. 0.02 gas meters

D. 20% of the gas meters

To solve this problem, divide 1 by 5. Add a decimal after the 1 and add one zero. The answer is .2.

10. Avery and the gas crew are installing 1 mile of new residential gas piping in a subdivision. The crew had completed 0.40 miles on the first day. What fraction of the project would Avery report to the supervisor is completed? Simplify fractions to lowest terms.

A. 40%

B. 4/10

**C. 2/5**

D. 40/50

Write .40 as 40/100. Divide the numerator and denominator by 20. 2/5 is the answer.

11. Laurie is restocking the gas distribution trucks with pipe fusion fittings. She found that 2/3 of the trucks needed 1 inch butt fusion fittings. How would Laurie report her findings to her supervisor as a decimal number?

A. 667% of the trucks

B. 6.67 of the trucks

**C. 0.6 of the trucks**

D. 0.0667 of the trucks

To solve this problem, divide 2 by 3. Add a decimal after the 2 and add three zeros until you see that the 6 is repeating. The answer is .6.