Multiply Fractions Assessment Answer Key
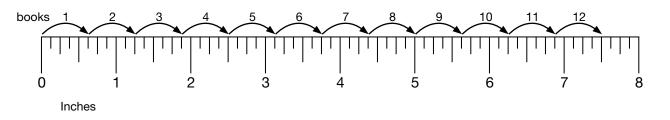
1. B

2. D

3. B

4. C

5. A

6. D

7. C

8. D

9. $11 \times \frac{1}{4} = \frac{11}{4}$ teaspoons, or $2\frac{3}{4}$ teaspoons;
Sample explanation: Each pizza gets $\frac{1}{4}$ teaspoon
of salt, so 11 pizzas will need 11 times $\frac{1}{4}$ teaspoon.
In a fraction, the numerator is the number of copies of
the unit fraction that are used to build the fraction;
11 times $\frac{1}{4}$ is $\frac{11}{4}$, because $\frac{11}{4}$ is the fraction built
using 11 copies of $\frac{1}{4}$.

10. $22 \times \frac{3}{4} = \frac{66}{4}$ cups, or $16\frac{1}{2}$ cups; Sample explanation:
Each pot gets $\frac{3}{4}$ cup of soil, so 22 pots will need
22 times $\frac{3}{4}$ cup; $22 \times \frac{3}{4}$ is the same as $22 \times 3 \times \frac{1}{4}$,
which is the same as $66 \times \frac{1}{4}$, or $\frac{66}{4}$.

11. $\frac{275}{12}$ cups, or $22\frac{11}{12}$ cups; Sample explanation: Each
student gets $\frac{11}{12}$ cup and there are 25 students, so the
total amount of popcorn needed is $\frac{11}{12}$ cup copied
25 times, or $\frac{11}{12}$ cup multiplied by 25.

$25 \times \frac{11}{12} = 25 \times 11 \times \frac{1}{12} = 275 \times \frac{1}{12} = \frac{275}{12}$

12. Yes; Sample explanation: The width of all the books put
together is $12 \times \frac{5}{8} = 12 \times 5 \times \frac{1}{8} = 60 \times \frac{1}{8} = \frac{60}{8}$ inches,
or $7\frac{1}{2}$ inches. The shelf space is 8 inches, so the books
will fit.

Sample drawing: