Problem Solving: Percent Problems

Solve.

1. Noah spent 50 minutes cleaning his room. For 20% of that time, he put away clothes. How long did he put away clothes? Hint: Write 20% as 0.20, then multiply by 50.

2. Out of 80 members of the community recreation club, 60 voted to have a spaghetti dinner each month. What percent voted to have a spaghetti dinner each month? Hint: Start by writing “60 out of 80” as \(\frac{60}{80}\).

3. Ten of the students in Kelly’s class take dance classes after school. That number is 40% of the students in the class. How many students are in Kelly’s class?

4. In Colin’s school there are 300 students. If 138 are boys, what percent are girls?

5. At Harry’s Secondhand Shop, clothing is priced at 45% of the price it would be if it were new. Sales tax of 5% is added to each purchase. What would the final cost be for a shirt that was priced at $24 when it was new?

6. Tori bought her skates at a clearance sale. The clearance price was 25% off the first sale price. The first sale price was 15% off the original price. If the clearance price was $51, what were the sale and original prices? Hint: If a new price is 25% off, what percent of the old price is it?