## Mixture Word Problems

1. Macario is making 12 pounds of nut mixture with macadamia nuts and almonds. Macadamia nuts cost $\$ 9$ per pound and almonds cost $\$ 5.25$ per pound. How many pounds of macadamia nuts and how many pounds of almonds should Macario use for the mixture to cost $\$ 6.50$ per pound to make?
2. Carmen wants to tile the floor of his house. He will need 1,000 square feet of tile. He will do most of the floor with a tile that costs $\$ 1.50$ per square foot, but also wants to use an accent tile that costs $\$ 9.00$ per square foot. How many square feet of each tile should he plan to use if he wants the overall cost to be $\$ 3$ per square foot?
3. Riley is planning to plant a lawn in his yard. He will need nine pounds of grass seed. He wants to mix Bermuda seed that costs $\$ 4.80$ per pound with Fescue seed that costs $\$ 3.50$ per pound. How much of each seed should he buy so that the overall cost will be $\$ 4.02$ per pound?
4. Marquese is making 10 pounds of trail mix from raisins and nuts. Raisins cost $\$ 3.45$ per pound and nuts cost $\$ 7.95$ per pound. How many pounds of raisins and how many pounds of nuts should Marquese use for the trail mix to cost him $\$ 6.96$ per pound?
5. Amber wants to put tiles on the backsplash of her kitchen counters. She will need 36 square feet of tile. She will use basic tiles that cost $\$ 8$ per square foot and decorator tiles that cost $\$ 20$ per square foot. How many square feet of each tile should she use so that the overall cost of the backsplash will be \$10 per square foot?

## Key

1. 8 pounds of almonds and 4 pounds of macadamia nuts
2. 800 square feet of the cheaper tile and 200 square feet of the accent tile
3. 3.6 pounds of Bermuda grass seed and 5.4 pounds of Fescue seed
4. 2.2 pounds of raisins and 7.8 pounds of nuts
5. 30 square feet of basic tiles and 6 square feet of decorative tiles
