

6.7 Applications of Rational Expressions

1. Alice and Bob both made a 600km roadtrip. Alice drove 20km/h slower than Bob. The trip took her 2.5 hours longer. Find both their speeds.
2. Alice drives 20km to work; Bob drives 25km. They drive at the same speed (on average). The trip takes Bob 6 minutes longer. Find their speed.
3. Cam can paint a house in 12 hours. Dave takes 9 hours. How long does it take them together?
4. Julie can paint a fence in 12 hours. With Betsy's help the job takes 5 hours. How long would it take Betsy on her own?
5. It takes 2 hours to drain a pool and 1.5 hours to fill it. How long does it take to fill the pool when the drain is open?
6. Organic meat is three times the price of non-organic meat. A restaurant bought 160kg of meat, \$72 of each type. What is the price/kg of each type?