

Decimal Problems

1. **a.** Find the smallest number with two decimal digits that is more than 1.
 - b.** Call the number you found in **a.** “ y ”. Find a number between y and 1.
 - c.** Using each of the digits 2, 3, and 7 once, make as many decimal numbers as you can that are greater than 1. All your numbers should have at least one decimal digit. Then order your decimals from the smallest to the greatest.

2. On the right are men's 200 m final results from the 2004 Olympics Games in Athens.

Name	Time (seconds)
1 Shawn Crawford (USA)	19.79
2 Bernard Williams (USA)	20.01
3 Justin Gatlin (USA)	20.03
4 Frank Fredericks (Nam)	20.14
5 Francis Obikwelu (Por)	20.14
6 Stephane Buckland (Mri)	20.24

- a.** Between which (consecutive) places is the biggest difference in time?
How much is that difference?
- b.** Between which places is the least difference in time?

3. Here you see women's individual all-around gymnastics final results from the 2004 Olympics Games in Athens.

Name	Points
1 Alina Kabaeva (Rus)	108.400
2 Irina Tchachina (Rus)	107.325
3 Anna Bessonova (Ukr)	106.700
4 Aliya Yussupova (Kaz)	103.975
5 Natalia Godunko (Ukr)	103.800
6 Simona Peyscheva (Bgr)	101.050

- a.** Between which places is the biggest difference in point count?
How much is that difference?
- b.** Between which places is the least difference in point count?
How much is that difference?

4. Printing one page costs \$0.008.

- a.** Find the cost of printing an 85-page book.
 - b.** What is the difference in costs for printing a 120-page book and a 100-page book?
5. Jack bought 8 drill bits for \$1.22 each, 10 washers for \$0.11 each, and 2 hammers for \$4.59 each.
 - a.** Estimate his total bill. Then calculate it exactly.
 - b.** What was his change from \$50?

6. **a.** Your old fridge uses 984 kWh of energy per year. If you pay \$0.093 per kWh, what is the cost of electricity for running that fridge?
- b.** A new fridge will only use 407 kWh per year. How much money will you save yearly if you switch to that fridge?