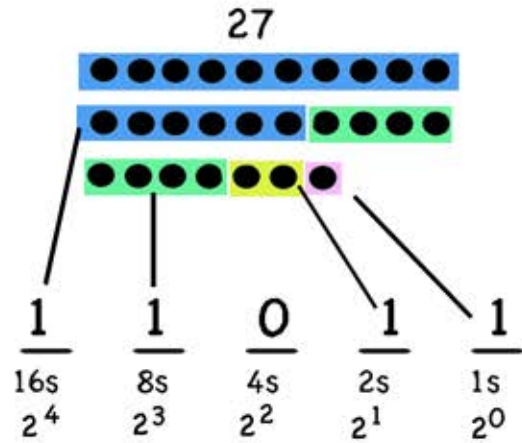
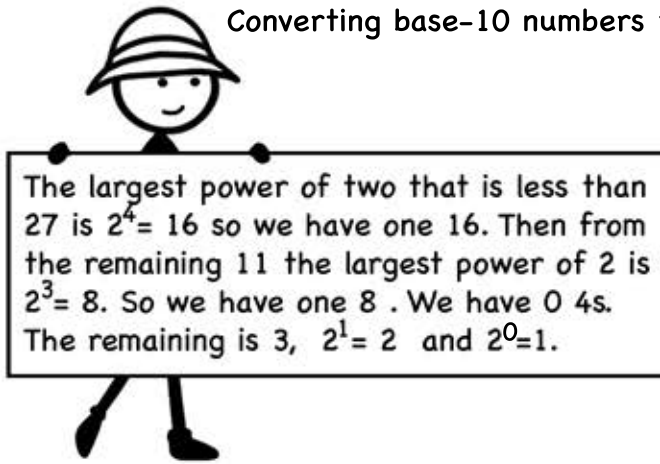


Binary numbers - Worksheet 3

Converting base-10 numbers to base-2 (binary numbers)



Convert each base-10 number to base-2

1. Base-10 : 50

$\frac{1}{64s} \frac{1}{32s} \frac{0}{16s} \frac{0}{8s} \frac{1}{4s} \frac{1}{2s} \frac{0}{1s}$

Base-2: 110010

2. Base-10 : 20

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2: _____

3. Base-10 : 9

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2: _____

4. Base-10 : 23

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2 : _____

5. Base-10 : 72

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2 : _____

6. Base-10 : 46

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2 : _____

7. Base-10 : 100

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2 : _____

8. Base-10 : 64

$\frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2 : _____

9. Base-10 : 130

$\frac{\quad}{128s} \frac{\quad}{64s} \frac{\quad}{32s} \frac{\quad}{16s} \frac{\quad}{8s} \frac{\quad}{4s} \frac{\quad}{2s} \frac{\quad}{1s}$

Base-2 : _____