

Decimals and fractions – they're the same thing

ANSWER KEY

a) $0.3 = 3/10 = 30/100 = 30\%$.

b) $0.47 = 47/100 = 47\%$.

c) $0.05 = 5/100 = 1/20 = 5\%$.

Q1: 18 squares (18% of $100 = 18$)

Q2: €27

a) **Never** — 20% off €100 = €80; 10% off €80 = €72.
 30% off €100 = €70. The two-step is bigger than 30% .

b) **Never** — $€100 \times 1.25 = €125$; $€125 \times 0.75 = €93.75$. Not back to €100 — the percent changes base.

c) **Always** — 10% means one tenth; divide by 10.

d) **Always** — Both leave you paying 50% of the original.

e) **Sometimes** — True if both prices are the same. 50% off €10 (€5 saved) is less than 10% off €100 (€10 saved).

f) **Always** — 100% (the original) + 23% (the VAT) = $123\% = \times 1.23$.

EXTENSION SHEET · STRETCH ANSWERS

S1: $3/5 = 0.6 = 60\%$

S2: $20\% = 1/5 = 0.2$

S3: $75\% = 3/4 = 0.75$

S4: $0.75 = 3/4 = 75\%$

S5: $3/5 = 0.6 = 60\%$