

## Solutions

---

**2.1** Gradient= $(8-2)/(4-1)=6/3=2$ .

**2.2** Expand  $y-5=3x-6$ , so  $y=3x-1$ ; the intercept is  $-1$ .

**2.3** Substitute  $x=5$  into  $y=3x-1$ :  $y=15-1=14$ .

**2.4** The radius is the positive square root of 25, namely 5.

**3.1** False.  $y=2x$  and  $y=-x/2$  have gradients 2 and  $-1/2$ ; their product is  $-1$ . Equal gradients describe parallel distinct lines.

Local review guidance: show the chosen method; give the checked result; explain the condition or failed shortcut. This is authored classroom guidance.