

<b>Circles L2 Mark Scheme</b>		
<b>1(a)</b>	Diameter	[1]
<b>1(b)</b>	Radius	[1]
<b>1(c)</b>	Centre	[1]
<b>1(d)</b>	Circumference	[1]
<b>2(a)</b>	$1 \times 2 = 2 \text{ m}$	[1]
<b>2(b)</b>	$10 \div 2 = 5 \text{ cm}$	[1]
<b>2(c)</b>	$2 \times 3 \times 3.14$	[1]
	$= 18.84 \text{ cm}$	[1]
<b>2(d)</b>	$28 \times 3.14$	[1]
	$= 87.92 \text{ cm}$	[1]
<b>2(e)</b>	$3.14 \times 0.5^2$	[1]
	$= 0.785 \text{ m}^2$	[1]
<b>2(f)</b>	$2 \div 2 = 1 \text{ km radius}$ $3.14 \times 1^2$	[1]
	$= 3.14 \text{ km}^2$	[1]
<b>2(g)</b>	$314 \div 3.14 \div 2$	[1]
	$= 50 \text{ m}$	[1]
<b>2(h)</b>	$628 \div 3.14 \div 2 = 100 \text{ mm radius}$	[1]
	$3.14 \times 100^2$	[1]
	$= 31400 \text{ mm}^2$	[1]
<b>3(a)</b>	$2 \times 3.14 \times 5$	[1]
	$= 31.4 \text{ cm}$	[1]
<b>3(b)</b>	$1 \times 3.14$	[1]
	$= 3.14 \text{ cm}$	[1]
<b>3(c)</b>	$88 \times 3.14$	[1]
	$= 276.32 \text{ mm}$	[1]
<b>3(d)</b>	$2 \times 120 \times 3.14$	[1]
	$= 753.6 \text{ m}$	[1]

<b>4(a)</b>	$3.14 \times (12 \div 2)^2$	[1]
	$= 113.04 \text{ cm}^2$	[1]
<b>4(b)</b>	$3.14 \times 9^2$	[1]
	$= 254.34 \text{ mm}^2$	[1]
<b>4(c)</b>	$3.14 \times 126^2$	[1]
	$= 49850.64 \text{ m}^2$	[1]
<b>4(d)</b>	$3.14 \times (99 \div 2)^2$	[1]
	$= 7693.785 \text{ mm}^2$	[1]

<b>5(a)</b>	$3.14 \times 90^2$	[1]
	$= 25434$	[1]
	$25434 \div 250 (= 101.736)$	[1]
	101 sheep	[1]
<b>5(b)</b>	$25434 \div 350 (= 72.67)$	[1]
	72 cows	[1]

<b>6(a)</b>	$3 \div 2 (= 1.5)$	[1]
	$3.14 \times 1.5^2 (= 7.065)$	[1]
	$7.065 \text{ m}^2$	[1]
<b>6(b)</b>	$3 \times 3 (= 9)$	[1]
	$9 \text{ m}^2$	[1]
<b>6(c)</b>	$9 - 7.065 (= 1.935)$	[1]
	$1.935 \text{ m}^2$	[1]